





Library  
of the  
University of Toronto



Digitized by the Internet Archive  
in 2018 with funding from  
University of Toronto



COLOURED ILLUSTRATIONS  
OF THE  
EGGS OF BRITISH BIRDS.

---

VOL. II.

“ It wins my admiration  
To view the structure of that little work—  
A bird’s nest. Mark it well within, without ;  
No tool had he who wrought, no knife to cut ;  
No nail to fix ; no bodkin to insert ;  
No glue to join : his little beak was all.  
And yet how neatly finished ! What nice hand  
With every implement and means of art,  
And twenty years’ apprenticeship to boot,  
Could make me such another ? Fondly, then,  
We boast of excellence, whose noblest skill  
Instinctive genius shames.

COLOURED ILLUSTRATIONS  
OF THE  
EGGS OF BRITISH BIRDS,

ACCOMPANIED WITH DESCRIPTIONS

OF THE

EGGS, NESTS, ETC.

BY

WILLIAM C. HEWITSON.

IN TWO VOLUMES.

VOL. II.

LONDON:  
JOHN VAN VOORST, PATERNOSTER ROW.

M.DCCC.XLVI.

LONDON:  
Printed by S. & J. BENTLEY, WILSON, and FLET,  
Bangor House, Shoe Lane.







*RASORES.**COLUMBIDÆ.*

## RING DOVE,

WOOD PIGEON, CUSHAT.

COLUMBA PALUMBUS.

PLATE LX. FIG. I.

THE WOOD PIGEON begins to build early in April, and is then to be met with breeding in almost every wood and plantation throughout the country ; and though, in some instances, it retains much of that shyness which characterized it during the winter, and does not generally allow you to come near it on the nest, it is sometimes much more familiar, building its nest in pleasure-grounds in the immediate vicinity of the house. At Seaton Burn, near Newcastle, these welcome and delightful visitors may be seen from the windows of the house, whilst sitting on their eggs ; and, in one instance, I observed a nest, which was placed in a single thorn-bush within a few yards of the gardener's cottage, where children were playing round it all day long, and, what is still more unusual, a pair reared their young ones during the last summer, in ivy against the house, close under one of the lodging-room windows.

The Ring Dove builds a nest so slight, that it is a matter of surprise that it is not blown out of the tree, or the eggs out of it. It is formed of dry sticks, crossing each other, and is without any cement or lining whatever ; it is a level platform, with little or no concavity, and has very little the appearance

of a bird's nest ; it is so loosely put together and so slight, that the eggs may, in many instances, be seen through from below. Mr. J. H. Tuke informs me, that he has frequently found the nest of this species upon the deserted nest of a squirrel.

The Ring Dove seems to prefer the branches of the oak and fir-tree, as being more horizontal and better suited to the flatness of its nest ; it is found, also, in thorns, and in ivy growing against trees. It has two or three broods in the year, and lays invariably two eggs, of a glossy white, and, for the most part, of a perfect oval. I have known young ones in the nest as late as the middle of September.



*RASORES.**COLUMBIDÆ.*

## STOCK DOVE.

*COLUMBA ŒNAS.*

PLATE LX. FIG. II.

THE STOCK DOVE, though rarely met with in the north of England, breeds in some of the southern counties: it is not uncommon in Epping Forest, where, under the kind guidance of Mr. H. Doubleday, I have taken its eggs from the pollard hornbeam-trees, in which it breeds.

In Norfolk, Mr. Salmon says, that the Stock Dove occupies the deserted rabbit burrows upon warrens, placing its eggs about a yard from the entrance of the hole, usually upon the bare sand, but sometimes making use of a small quantity of dry roots, barely sufficient to keep the eggs from the ground, and that it also lays its eggs under those thick furze-bushes which are impervious to the rain: both very curious habitats for a bird like this. The Stock Dove breeds early in April, laying, like the rest of the genus, its two pure white eggs.

*RASORES.**COLUMBIDÆ.*

## ROCK DOVE.

COLUMBA LIVIA.

PLATE LX. FIG. III.

IN habits this species differs considerably from the rest of the genus: whilst they chiefly frequent woods, roosting upon and making their nests in trees, the Rock Dove inhabits the cliffs upon our sea-coast, in which it breeds, laying its eggs in holes and fissures of the rocks. Mr. Low, in his *Fauna Orcadensis*, says, that “they are found round all the rocks of the mainland and isles, where they build in the caves, but retire further in than the hawks, gulls, or most other sea-birds, except some of the petrels.”

In the Shetland Islands they abound, breeding in the numerous spacious caverns, into which the sea constantly rushes; they have every appearance of being tame, and are so easily approached within gun-shot, that, until assured of the contrary, we took them for the inmates of some neighbouring dovecote. They approach quite close to the huts of the fishermen, to feed over the small cultivated patches of corn-land; and, I have little doubt, might, if encouraged and fed, be readily domesticated.

Mr. G. C. Atkinson found several of the eggs on the isle of Harris, at the furthest extremity of caves in fissures in the rocks. The eggs are two in number, and usually somewhat less of a regular oval than those of the two species before described.

*RASORES.**COLUMBIDÆ.*

## TURTLE DOVE.

COLUMBA TURTUR.

PLATE LX. FIG. IV.

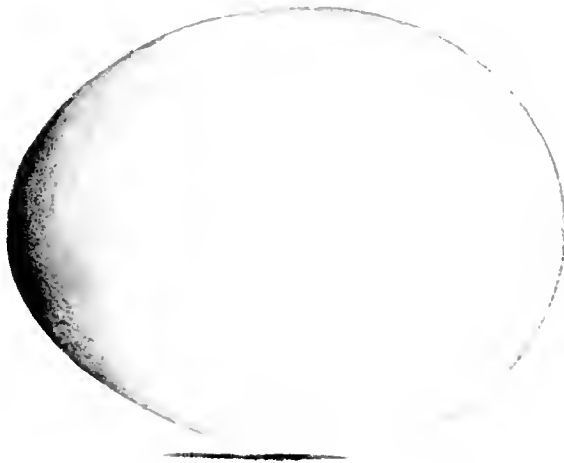
LIKE the stock dove, this species breeds only towards the south of England ; being scarcely ever met with in the north, and then only in winter. In Norfolk and Suffolk it is not at all uncommon, building its nest after the same manner as the ring dove in woods and plantations, but frequently in a less elevated position : it is of sticks placed crosswise, and forming a very loosely constructed platform ; upon this it lays its two white eggs, which are more pointed than those of the other species.







LXI



*RASORES.**PHASIANIDÆ.*

## PHEASANT.

PHASIANUS COLCHICUS.

PLATE LXI.

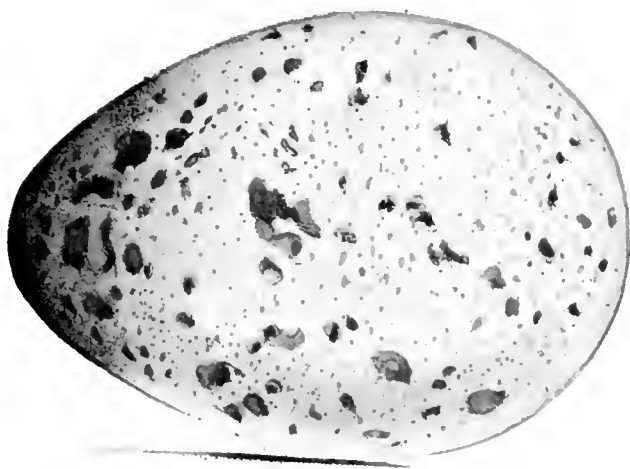
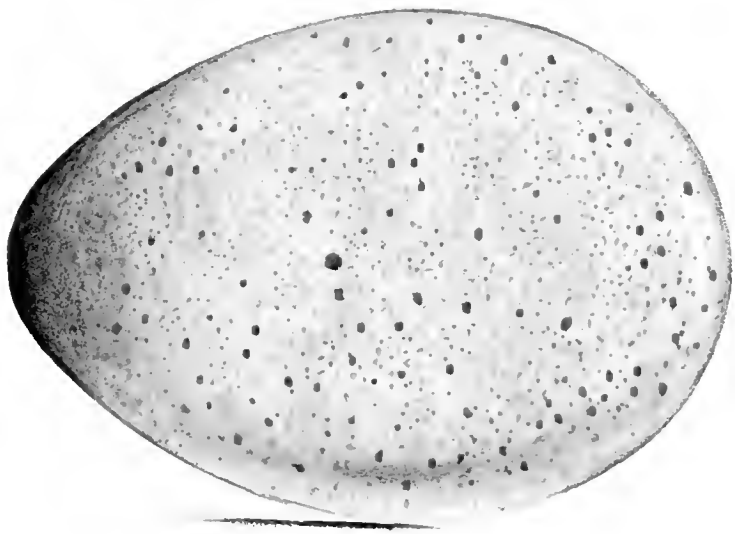
THE PHEASANT is too well known to need much description. It breeds throughout the country in May and June, and lays its eggs upon the ground in woods and plantations amongst the underwood; under the cut branches of trees, and in the long grass; sometimes also in hedge-rows, and occasionally in the open fields: they are from ten to fourteen in number, and nearly round; they are most commonly of the colour of the Plate, but frequently much lighter. From the near approach of the Pheasant to domestication, the eggs are subject to the same strange and whimsical forms seen in those of our common fowls. I possess some very remarkable deformities of this kind, obligingly sent me by the Hon. Mrs. Liddell; one in particular, which is cylindrical, about two inches and a half long, and an inch and a half in diameter.







LXII



*RASORES.**TETRAONIDÆ.*

## WOOD GROUSE,

COCK OF THE WOODS, CAPERCAILLIE.

PLATE LXII. FIG. I.

THIS fine bird, which has been for some time extinct in our own country, breeds in the mountainous pine-forests of the north of Europe, in Norway, Sweden, and Russia. In Norway it is, however, in some seasons so rare—and the year of our visit was one of scarcity—that it was with the greatest difficulty that we could procure specimens of its eggs; and although wandering for many days through those parts which were far from human habitation, and where we were told it was abundant, we had in two instances only the satisfaction of seeing it alive. In these remote situations it lays its eggs, under the shelter of a young spruce-fir tree, in those parts of the forest which are clear of the larger timber; they are from eight to twelve in number, and are deposited upon a small quantity of dry grass towards the end of June.

Though for many years extinct in this country, several attempts have recently been made to re-establish the Capercaillie in Scotland, and, I trust, with some success. The eggs of this and the following species have all the character of those of the turkey.

*RASORES.**TETRAONIDÆ.*

## BLACK GROUSE.

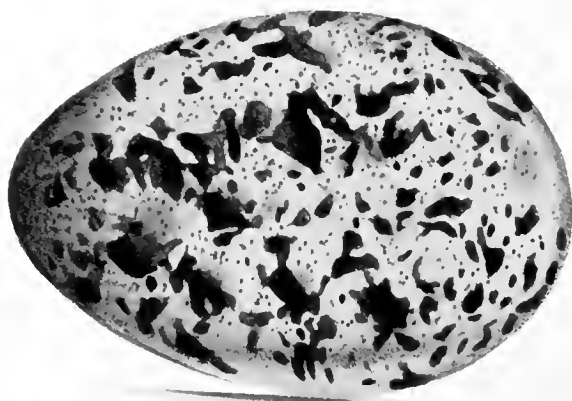
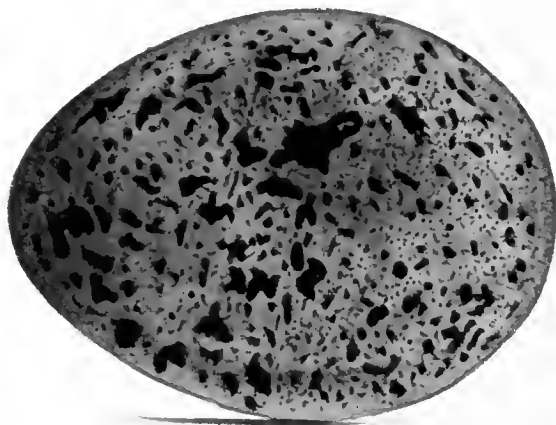
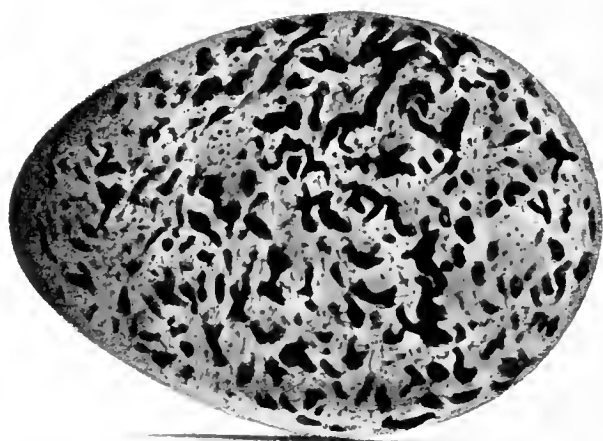
TETRAO TETRIX.

PLATE LXII. FIG. II.

IN England, the Black Grouse is confined to the northern counties, but is generally diffused over most parts of Scotland. Many experiments have been made to introduce it into those districts, further south, where it was not naturally indigenous, but for the most part without success, although attempted in situations which appear in every way favourable, and similar to those in which they are naturally in great abundance.

In habits, this species differs considerably from the next. Whilst the red grouse inhabits the most desolate and the wildest heaths, the Black Grouse frequents the borders of cultivation, breeding either amongst the heath or in recently planted ground, and sometimes in the hedgerows. It lays from eight to ten eggs, usually much less strongly spotted than the *Plate*.





*RASORES.**TETRAONIDÆ.*

## RED GROUSE.

## TETRAO SCOTICUS.

PLATE LXIII. FIGS. I. AND II.

THE eggs of the Red Grouse, for depth and richness of colouring, are unrivalled by those of any other British bird, and are, in consequence, a beautiful ornament to our cabinets. The Red Grouse, which has hitherto been met with only in the British Islands, breeds on most of the high heathy moors of this country, especially those in the north of England and the Highlands of Scotland. It is abundant, also, on most of the Western Islands, and is met with sparingly in Orkney, but has never been found in Shetland, though at so short a distance. It begins to breed early in April, and makes its nest, when any, in a tuft of heather, gathering together a few pieces of heath and some dry grass. The eggs are from eight to twelve in number, and present many very beautiful and strongly contrasted varieties ; eggs similar to both the figures of the plate are frequently found in the same nest.

*RASORES.**TETRAONIDÆ.*

## PTARMIGAN.

TETRAO LAGOPUS.

PLATE LXIII. FIG. III.

ALTHOUGH the Ptarmigan breeds in various parts of Scotland, the eggs are very difficult to obtain. Its breeding-places are those bare stony spots which cover a portion of most of the higher mountain ridges amongst which it finds secure retreat ; its similarity of colouring is so great, and its heedlessness of danger is such, for it will remain closely crouched till you approach within the shortest distance of it, that it thus eludes discovery.

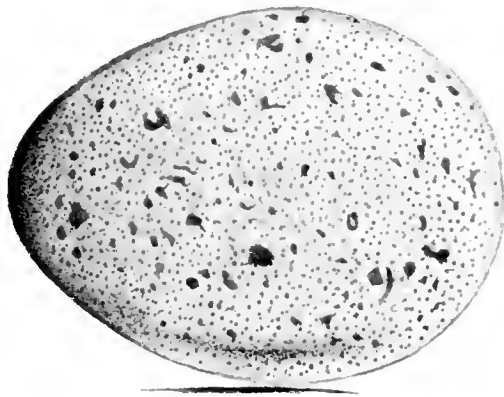
The eggs, which are from eight to twelve in number, are deposited either upon the bare ground or upon a small portion of dry grass or heath ; those that I have seen are precisely like some of the varieties of those of the red grouse.

The Ptarmigan, as well as several other species of grouse, are said to be very abundant in Norway during the breeding season ; they were all, however, very scarce during the summer of our visit to that country : the only variegated grouse we met with was the *T. Saliceti*, the willow grouse ; and, of this, two specimens only were all that rewarded our many wild rambles on those glorious snow-clad mountains, and these were so tame that we had difficulty in compelling them to fly.





LXIV



*RASORES.**TETRAONIDÆ.*

## PARTRIDGE.

## PERDIX CINEREA.

PLATE LXIV. FIG. I.

THE PARTRIDGE, though everywhere more or less frequent, is most numerous in the counties of Norfolk and Suffolk. It is usually met with amongst the crops of the cultivated land ; but I have not unfrequently found a covey upon those heathy, uncultivated moors which border on vegetation ; they are, in such places, wild and wary, and difficult to shoot.

The Partridge lays its eggs, either upon the bare ground, or upon a few pieces of dry grass carelessly scraped together ; they are deposited in open pastures, meadows, and corn-fields, in a tuft of grass, or under the shelter of furze or other brushwood, amongst newly planted trees, and the bottom of a thorn hedge.

The eggs are numerous ; they are usually ten or twelve, but are said, in some instances, to equal eighteen or twenty in number : they differ, like those of the pheasant, many being considerably lighter than the plate. The assiduous perseverance of the Partridge during incubation is well known ; numbers of instances might be given in illustration ; none, perhaps, more striking than that mentioned by Montague, of one which allowed itself, and eggs, to be deposited in a hat, and thus carried unresistingly into captivity, where it continued to sit them till the young ones were brought out.

*RASORES.**TETRAONIDÆ.*

## RED-LEGGED PARTRIDGE,

GUERNSEY PARTRIDGE, FRENCH PARTRIDGE.

PERDIX RUFA.

PLATE LXIV. FIG. II.

THE RED-LEGGED PARTRIDGE is, like the pheasant, only a native of this country by adoption, and without its long claim of naturalization; it is, however, becoming so generally dispersed through some of the southern counties, that I have thought it right to give its egg a place in this work. In Oxfordshire, Mr. Daniel says that it is abundant, the Marquis of Hertford having introduced it by bringing over, from the Continent, many thousand eggs, which were reared under hens, and their produce turned at large. It is also abundant in the counties of Norfolk and Suffolk. Upon the estate of Sir Thomas Gooch, Bart., to whose kindness I owe the pleasure, I have seen several covies during a day's shooting. They are much wilder than the common partridge, and run for a considerable distance before they will take wing, keeping the dogs at a running point.

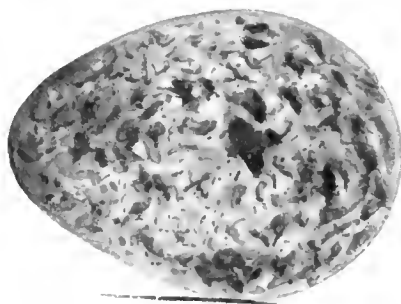
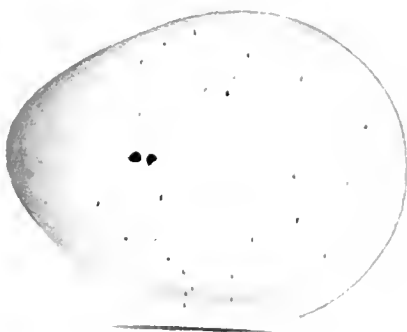
The Red-legged Partridge makes more of a nest than the common species, and raises it a little above the level of the ground; it is of dry grass mixed with a few feathers of the bird. The usual number of eggs is from ten to twelve. Mr. Salmon tells me that he has seen a nest containing eighteen eggs; and Temminck says that they lay from fifteen to

eighteen eggs. Mr. Salmon says that, from the wilder nature of this bird, it seems to prefer the heathy districts, to those that are under cultivation ; if this is the case, and it would thrive upon the extensive moors of the north of England, it would there form a beautiful additional tenant of the soil.





127





*RASORES.**TETRAONIDÆ.*

## VIRGINIAN QUAIL.

## ORTYX VIRGINIANA.

PLATE LXV. FIG. I.

ALTHOUGH, like the pheasant and the red-legged partridge, this species is a forced, rather than a voluntary visitant of this country, and one of but recent date, I have followed Mr. Yarrell in admitting it to our list, as it will, probably, in a few more years become extensively naturalized and widely dispersed over the country. Mr. J. Hancock has a specimen shot in Northumberland, and another was shot off a tree near Bristol. Mr. Yarrell quotes a letter of the Rev. R. Lubbock, in which it is stated that a nest, supposed to be that of this species, was found at Barton, in Norfolk, some years ago; the man who found it, and who saw the bird, having stated that it resembled a partridge in its flight, being much smaller. Mr. Salmon obligingly sent me some of these eggs, which were in his collection, to look at; and I have no doubt at all they were those of the same bird as the one now figured, an American specimen, from the collection of my kind friend Mr. Yarrell. The following interesting account is copied from his book; it is communicated by a gentleman who had some of these birds in his garden.

“Towards the end of May, I perceived one of the cock birds carrying straws, and twisting them about over his head; and I found that they were making a nest within a bundle of pea-sticks. This nest was the joint production of male and

female ; it was placed on the ground within the pea-sticks, and shaped much like a wren's, with a hole on each side, and covered over at top. After the hen had laid about twelve eggs, she began to sit, and with as much assiduity as our common hen. When I thought it was her time to hatch, I examined her nest, and found it deserted, and the egg-shells lying about. Much pleased with this circumstance, I went cautiously about to find the dam with her young ones ; and, after searching for some time, the first intimation that I had of her presence was from her flying in my face with great agitation, like our common hen."

What is here told with regard to the nest of this species is most curious, all the other rasorial birds being especially careless in its construction.

*RASORES.**TETRAONIDÆ.*

## QUAIL.

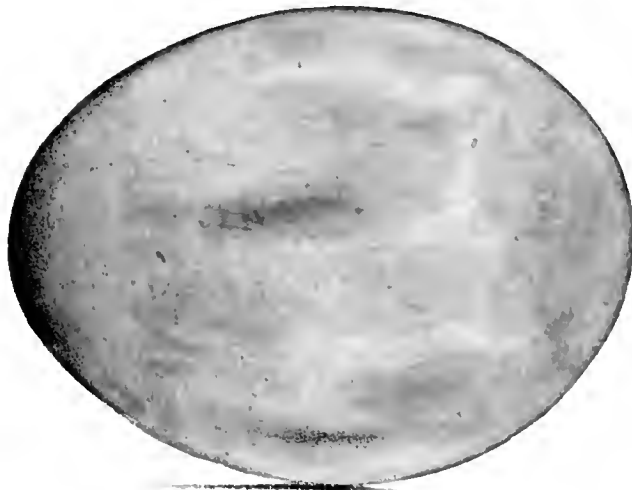
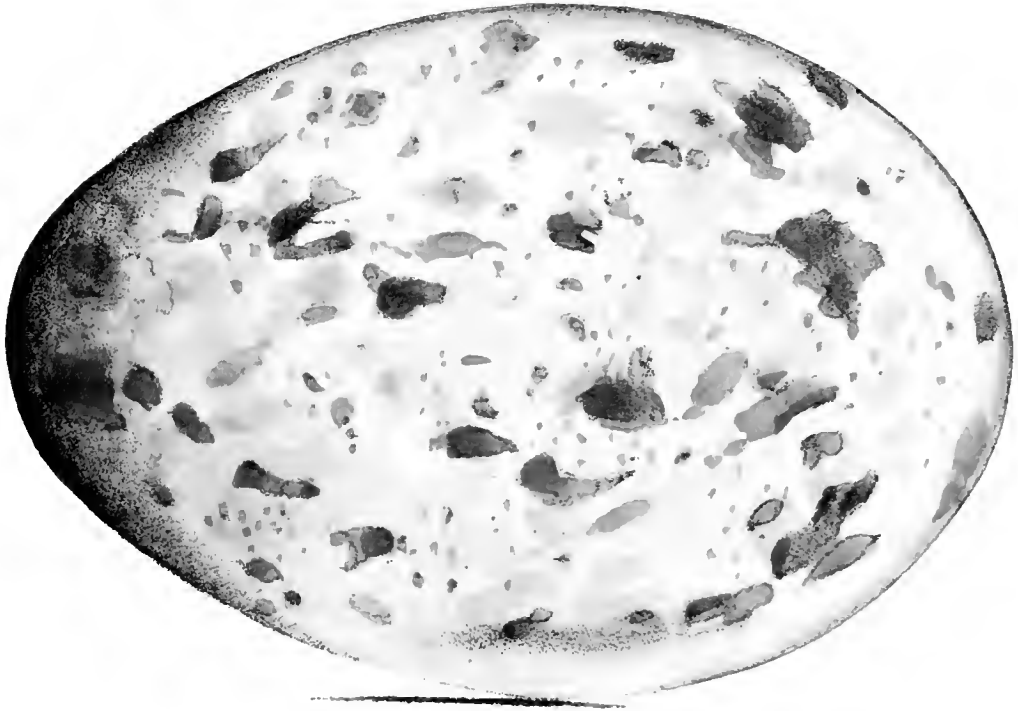
## COTURNIX VULGARIS.

PLATE LXV. FIGS. II. AND III.

THE QUAIL is a rare bird in the north of England, a pair or two only occurring occasionally during the breeding-season ; they are then, however, not likely to be disturbed, being concealed amongst the corn and long grass, and are probably more numerous than is supposed. They lay their eggs upon the ground, in meadows and corn-fields, having first collected together a small quantity of dry grass ; these vary much in number, being from six to fourteen, though most commonly about ten ; they differ also greatly in colour and markings, as the Plate will show, there being many more equally striking varieties. The first figure is the egg most characteristic of the species.







*RASORES.**STRUTHIONIDÆ.*

## GREAT BUSTARD.

OTIS TARDA.

PLATE LXVI. FIG. I.

THIS fine bird, which the gun or the spread of cultivation has either destroyed or driven from our shores, will soon be remembered only as once having existed in our land, gladdening with its presence the open wolds and downs of our country, and adding an interest to the bleak and sterile heath. The Bustard has existed, till within a few years, on those extensive sheep-walks, the wolds of Yorkshire, from whence I have seen their eggs; and in the earlier time of Montagu was to be met with on the plains of Salisbury; but is now, if it has been suffered to see the present day, confined entirely to the county of Norfolk, upon the open fields of which a sad remnant was yet in existence a very few years ago. Mr. Spurgeon, of Lynn, to whom I am indebted for an English specimen of the egg of this bird, gave me the following information, about six or seven years since. He says, "I am much afraid that all the male birds are extinct in this kingdom, and, therefore, a few years will end the species altogether. I have seen from fourteen to eighteen females in the various large fields in the west of Norfolk, called breaks; they are wild, and difficult to approach." The Bustard makes no nest, but lays its eggs, two in number, upon the bare ground.

*RASORES.**STRUTHIONIDÆ.*

## LITTLE BUSTARD.

OTIS TETRAX.

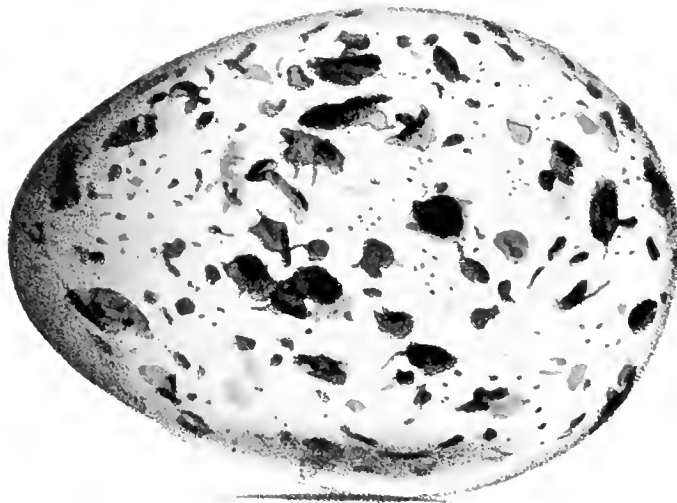
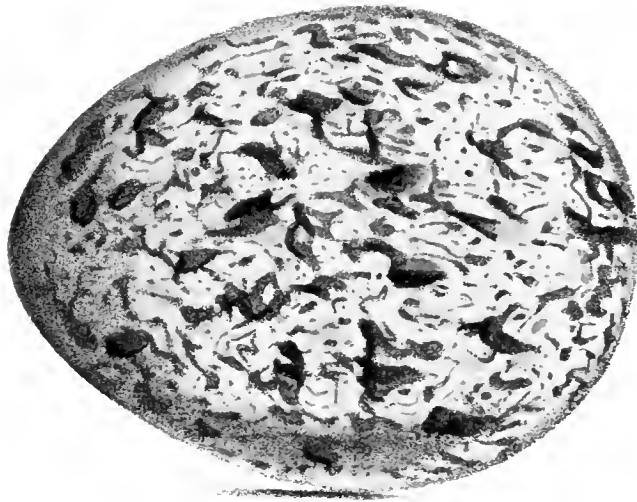
PLATE LXVI. FIG. II.

LIKE the closely allied species, the Little Bustard lays its eggs upon the bare ground. They are said to be from three to five in number, and have been described as “of a clear, shining, grass-green colour, without spot or stain.” Those eggs which I have seen are all, more or less, suffused with colour. Any one who had previously seen the eggs of the great bustard would look for a similar character in those of the present species ; and he would be pleased in observing the resemblance which they bear to each other, distinct as they are from those of all other birds.





LXVII



*RASORES.**STRUTHIONIDÆ.*

## NORFOLK PLOVER.

THICK KNEED-BUSTARD. STONE-CURLEW.

ŒDICNEMUS CREPITANS.

PLATE LXVII.

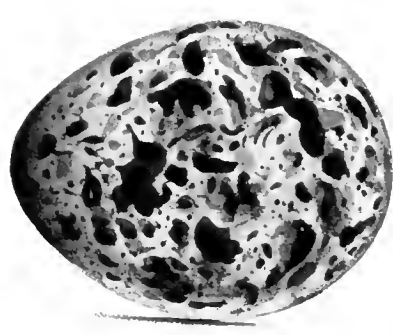
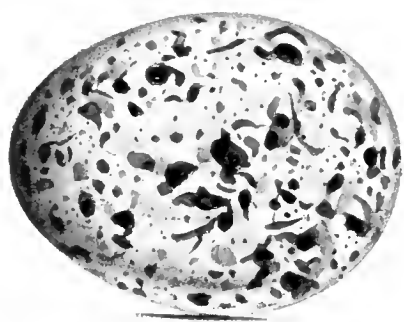
THE Norfolk Plover, as its name would lead us to expect, is abundant in that county, as also in the adjoining one of Suffolk. It breeds upon those extensive sandy flats which chiefly border upon the sea-coast; its nest is nothing more than a slight cavity scratched upon the surface of the ground; its eggs are invariably two in number; those figured in the plate are selected from a large and beautiful series, for which, with the information given above, I am indebted to Mr. Salmon.

The figures may be considered as two extremes, between which there is a regular gradation of varieties, from the closely-spotted surface of the first figure, the markings of which have but one shade of colour throughout, to the more distant, deep, and many-tinted spots of figure two; these are both of the usual ground-colour. There are, however, other varieties, the surface of which are of a dirty yellow, with the spots upon it muddy and ill-defined.





117 \*



*GRALLATORES.**CHARADRIIDÆ.*

## PRATINCOLE.

## GLAREOLA TORQUATA.

PLATE LXVII\*.

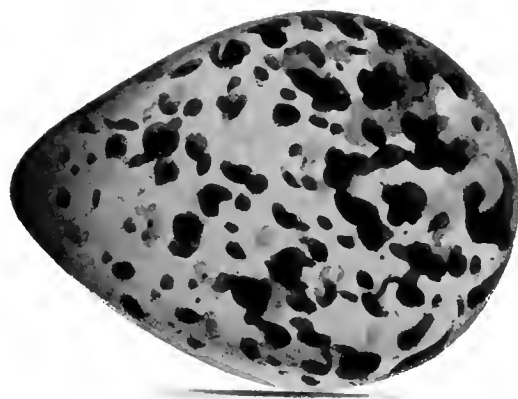
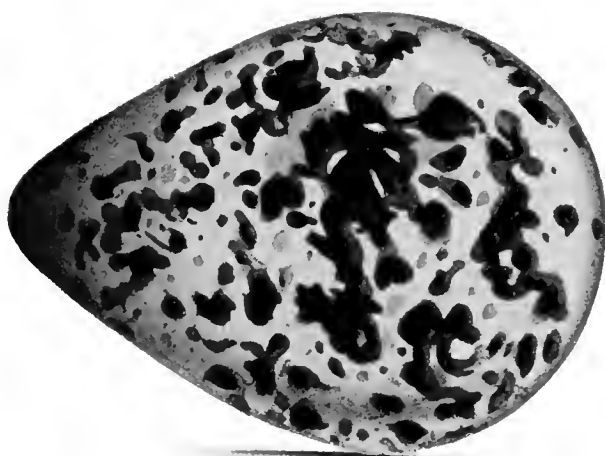
It has been my wish, in the prosecution of this work, to keep as much as possible to the arrangement and nomenclature which, at its commencement, I proposed to do,—that adopted by Mr. Yarrell, which appears to me one of the most natural that has been made use of by our ornithologists; and I shall best do so now by placing the egg of this species next after that of the Norfolk plover: a position much more natural than the one it occupies at present, and indicated by Mr. Yarrell himself as most in accordance with the habits of the bird, and in which it will no doubt appear in any future edition of his work. He says, “The Pratincole has been arranged by some authors with the swallows, by others near the rails; but I believe, with Mr. Selby, that it ought to be included in the family of the plovers; and had I known its plover-like habits and eggs sooner, I should have arranged it between *Cursorius* and *Charadrius*.” Besides the similarity of their habits, the fact of this species laying four eggs is a further link to connect it with the *Charadriidæ*.

The Pratincole is so rare, that but little is known with regard to its habits during the breeding-season, some skins of the bird having been presented to the Zoological Society, Mr. Yarrell states that in making enquiry of the donor

with regard to them, “ I learned that the habits of this bird corresponded closely with those of our plovers—frequenting sandy plains, flying and running with great rapidity, forming a slight nest in any depression in the dry soil, and laying four eggs. The eggs of the Pratincole which I have seen are very different, and therefore easily known, from those of any other species. The second figure of the plate, which is from the collection of Mr. Hancock, bears some resemblance to eggs of the black tern, in colouring only. The other, lent me by the Rev. A. Rawson, is more like eggs of the Norfolk plover, than of any other British bird; the shape and ground-colour are the same, and the colour and position of the spots not unlike, so that it will arrange very well next to those of that species.







GRALLATORES.

CHARADRIIDÆ.

## GOLDEN PLOVER.

CHARADRIUS PLUVIALIS.

PLATE LXVIII. FIG. 1.

THE GOLDEN PLOVER, though never numerous, is yet pretty generally dispersed over our heathy moors during the breeding-season, and is then rarely met with except in pairs. It is a very watchful bird, and usually discovers itself long before you approach it, by its clear and plaintive whistle, which may be heard at a great distance, and is very deceptive; upon hearing it when in search of their eggs I have frequently expected to see the bird close beside me, and after anxiously searching for it with my eyes all around, have discovered it perched, at a distance of three or four hundred yards, upon some hillock or rising ground, on which it mostly takes its stand.

Though, as I have just stated, usually very wary and difficult to approach during the earlier days of incubation, it will sometimes, when the eggs are nearly hatching, almost allow itself to be trodden upon before it leaves the nest.

The Golden Plover is one of the group of birds, comprising the genera *Tringa*, *Totanus*, and *Scolopax*, which almost invariably lay four eggs, very large in proportion to the size of the bird, and placed in a hollow of the ground, barely big enough to contain them; and this is the nest, with the addition, for the most part, of a slight lining of dry grass.

I have found the eggs fresh in May and June ; they are a good deal like those of the peewit and redshank, but may be always known from the former by their lighter ground colour, and from both by their greater breadth, the larger end forming a very perfect semicircle ; the spots are, too, for the most part, of a deeper hue, being usually of an intense brown, or blue-black.

*GRALLATORES.**CHARADRIIDÆ.*

## DOTTEREL.

CHARADRIUS MORINELLUS.

PLATE LXVIII. FIG. II.

It had always been supposed by ornithologists that the Dotterel was indigenous in this country. It had been frequently seen during the summer months upon those parts of the wide moors of Cumberland and Westmoreland which are its favourite resort; owing, however, to the difficulties which present themselves to the rambler on those glorious mountains, enveloped as they are, for the most part of the year, in a dense mist, the eggs remained undetected until the summer of 1835, when they were first discovered through the assiduity of Mr. Heysham, whose narrative I copy from the pages of Mr. Yarrell's Birds, not having by me the Magazine of Zoology and Botany, in which it was first printed.

“In the neighbourhood of Carlisle, Dotterels seldom make their appearance before the middle of May, about which time they are occasionally seen in different localities, in flocks which vary in number from five to fifteen, and almost invariably resort to heaths, barren pastures, fallow grounds, &c., in open and exposed situations, where they continue, if unmolested, from ten days to a fortnight, and then retire to the mountains in the vicinity of the lakes to breed. The most favourite breeding-places of these birds are always near to, or on the summits of, the highest mountains, particularly those

that are densely covered with the woolly fringe-moss, (*Trichostomum lanuginosum*,) which indeed grows more or less profusely on nearly all the most elevated parts of this alpine district. In these lonely places they constantly reside the whole of the breeding-season, a considerable part of the time enveloped in clouds, and almost daily drenched with rain, or wetting mists, so extremely prevalent in these dreary regions; and there can be little doubt that it is owing to this peculiar feature in their economy that they have remained so long in obscurity during the season of incubation. The Dotterel is by no means a solitary bird at this time, as a few pairs usually associate together, and live, to all appearance, in the greatest harmony.

“These birds do not make any nest, but deposit their eggs, which seldom exceed three in number, in a small cavity on dry ground, covered with vegetation, and generally near a moderate sized stone or fragment of rock. In early seasons old females will occasionally begin to lay their eggs about the 26th of May; but the greater part seldom commence before the first or second week in June. It would appear, however, from the following facts, that they vary exceedingly in this respect. On the 19th of July, 1833, a perfect egg was taken out of a female, which had been recently killed, on Robinson Fell; and on the 26th of May, 1834, I received four Dotterels from Keswick, which had been shot on Great Gavel the day before. In the ovary of one of them I found an egg almost quite ready for exclusion, being a difference of nearly eight weeks.

“The males assist the females in the incubation of their eggs. Anxious as I have been for several years past to procure the eggs of the Dotterel for the purpose of adding undoubted specimens to my cabinet, as well as to prove beyond all doubt that this bird breeds in Cumberland; yet it was not until the present year, that I had the gratification of

accomplishing an object which I have had so long in view. After repeated excursions through the lake district this summer, for the express purpose, I was so fortunate as to obtain their eggs in two different localities, namely, three on Whiteside, contiguous to Helvellyn, on the 29th of June; and two on the 5th of July, on Robinson, in the vicinity of Buttermere. The former had been incubated twelve or fourteen days, the latter were only recently laid; and in both instances the birds were seen to leave their eggs. On this day, the 5th of July, 1835, a young bird, a few days old, was also captured."

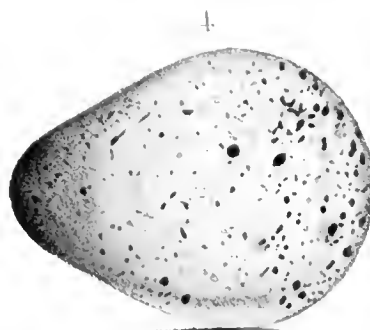
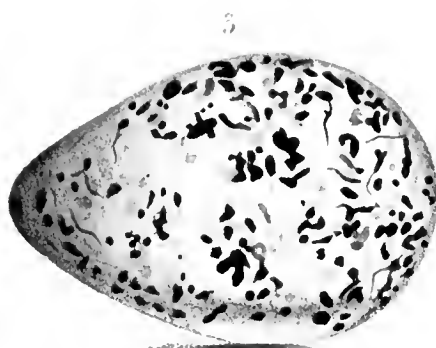
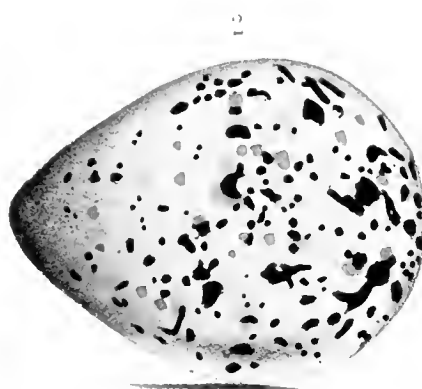
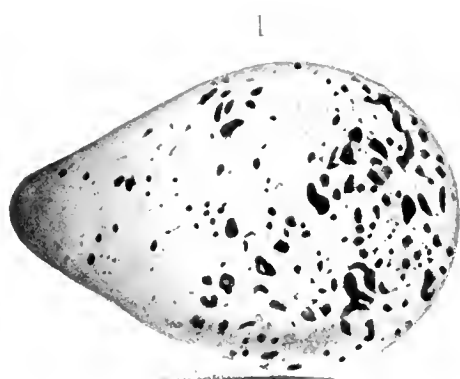
The Dotterel also breeds in Scotland. The egg from which the drawing is made, kindly lent me from the collection of Mr. Yarrell, was procured from the Grampian Hills. Eggs of this bird from Norway, also in the collection of Mr. Yarrell, are considerably smaller.

It appears from the observations of Mr. Heysham, as well as by the statement of Dr. Thieneman, that the Dotterel lays but three eggs; a curious deviation from the rule which seems to regulate the allied species, since all those of the genera *Charadrius*, *Scolopax*, and *Tringa*, lay invariably four eggs.









*GRALLATORES.**CHARADRIIDÆ.*

## RINGED PLOVER.

RING DOTTEREL, SAND LARK.

CHARADRIUS HIATICULA.

PLATE LXIX. FIGS. I. AND II.

I LOVE well to watch the graceful motions of this beautiful bird, as well when running with rapidity and confidence close beside me on the sea-beach, as when, with its gay companions, it is sweeping with great celerity past me on the wing, in quickly repeated evolutions.

The Ring Dotterel breeds on the greater part of our sea-coast, being most frequent near the mouths of rivers and smaller streams. It makes no nest, but lays its four conical eggs in a slight hole on the surface of the ground, either amongst small gravel, or upon the little hillocks of sand which occur so commonly on our flat sea-beach. In some of these substitutes for a nest, which I have seen, the eggs presented a very beautiful appearance upon the clean white sand; frequently near the root of some tall grass, which waved over them as a protection from the storm. During the breeding season, the Ring Dotterel is ever on the alert and on wing long before you reach its eggs, making its circuits round you, and uttering its sweet plaintive whistle of alarm—a sure indication that you are in the near neighbourhood of its eggs or young ones. It begins to breed early in May, and lays four eggs.

In a long walk along the Northumberland coast, in company with my friends the Messrs. Hancock, during the first week of the month of June, we found several of their eggs, some quite fresh ; though, at the same time, young birds were running upon the sand. Of the two figures in the plate, the first is the most common, both as regards shape and colour ; the other variety is, however, frequent.

*GRALLATORES.**CHARADRIIDÆ.*

## KENTISH PLOVER.

CHARADRIUS CANTIANUS.

PLATE LXIX. FIG. III.

THE KENTISH PLOVER has now been met with on various portions of the sea-coast of the south of England. Mr. Gould says, that it is found along the flat and shingly beaches of Kent and Sussex, and is sure to be met with on Selsey beach, and in the immediate neighbourhood of Hastings and Sheerness, near Sandwich, if sought for during the months of May, June, and July. It has also been killed near Great Yarmouth.

The late Mr. Hoy, who accompanied his information with a specimen of the egg of this species, kindly procured for me by Professor C. J. Temminck, says that the Kentish Plover frequents those parts of the sea-coast where there are extensive sandy flats. It makes no nest, but deposits its eggs, four in number, in a small hollow in the sand, or amongst fine shingle or broken shells.

Mr. Gould, in speaking of this and the following species, says that they lay five eggs. In this, he is evidently under a mistake.

*GRALLATORES.**CHARADRIIDÆ.*

## LITTLE RINGED PLOVER.

CHARADRIUS MINOR.

PLATE LXIX. FIG. IV.

THIS species was first pointed out as an inhabitant of Britain by Mr. Doubleday of Epping, who received it from Shoreham in Sussex, and so young that it must have been bred there. The person who shot it had long suspected, from its note, that it was a species yet unnoticed in this country.

The late Mr. Hoy, who, during his continental rambles had an opportunity of observing the habits of this species, favoured me with the following notice :—

“The Little Plover appears to be very rarely found on the sea-coast, but frequents in preference the banks of rivers, where it breeds. It lays its eggs on the sand, not a particle of grass or other material being used. It is very partial to sandbanks forming islands, which are often met with in some of the large rivers of the Continent. It may also frequently be found, during the breeding season, upon those large extents of sand which are met with at some little distance from the borders of rivers, overgrown in part with a coarse wiry grass.”

The egg of this species is, for the most part, as might be expected, a fac-simile, except in size, of that of the ringed plover. The specimen from which the drawing is now made,

bears a very close resemblance to eggs of the common sandpiper. I mention this, to show another example of that beautiful chain of resemblances which seem to exist through Nature's wide domain. The Little Ringed Plover is very closely allied in its form, and colouring, and general appearance, to the two preceding species; and so, for the most part, is its egg. In its habits, however, and the selection of its place of breeding, it differs from its allies, and resembles then more closely the common sandpiper, and so do some of the varieties of its eggs bear close resemblance to those of that species.







LXX.



*GRALLATORES.**CHARADRIIDÆ.*

## PEEWIT.

GREEN PLOVER, LAPWING.

VANELLUS CRISTATUS.

PLATE LXX.

THE PEEWIT chooses various situations for its eggs—heaths, commons, marshy grounds, and ploughed fields; preferring a mole-hill or other slight elevation: when the ground is moist, they are, however, occasionally found quite enveloped in water.

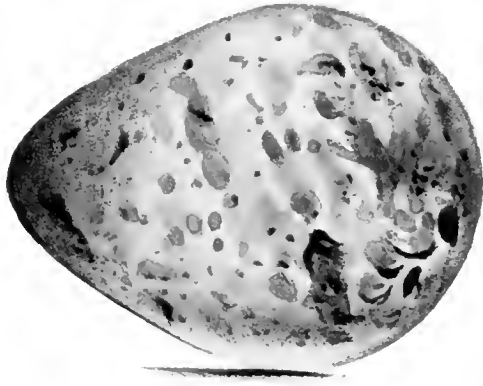
Like most of the same class of birds, it makes little or no nest; its eggs, four in number, being deposited upon the bare ground, or on a small quantity of dry grass, rushes, stalks of heath, or other plants, in a hole scratched for that purpose, and barely large enough to contain them, though arranged so as to occupy the least possible space, the small ends meeting in the centre.

I have never succeeded in surprising the Peewit upon its eggs—it is ever on the look-out; and, on your first entering a field, is on the wing, whirling about above your head, and endeavouring by its manœuvres, to lead you from its nest. The late Mr. John Laws, of Heddon Laws, in Northumberland, who was an acute observer of the habits of the feathered race, and had always been much interested by those of the Peewit, could, from long practice, discover when at a

distance, by the flight and motions of the bird, almost the exact position of its eggs, and would frequently walk directly up to them; whilst those who are, like myself, uninitiated in the pursuit, might wander, as I have often done, in fruitless weariness over a great extent of country. The eggs of the Peewit are as much prized by the epicure for their inward excellence, as they are by the collector for their outward beauty. Immense numbers are sent to Leadenhall Market in the spring, and the eggs of many other species of birds are imposed upon the Londoners in their stead. Mr. Yarrell mentions, that two hundred dozens of Peewits' eggs were sent in one season from Romney Marsh to Dover.

Although the eggs of the Peewit are for the most part very much alike—and any one who had not seen a large number of them, might suppose that they are subject to but little variety,—there is scarcely any bird, the eggs of which differ more. Mr. Charles Adamson, of Newcastle, has a large series of these eggs, selected by himself from thousands which are exposed for sale in Leadenhall Market, amongst which there is not only an extraordinary variety of colour, but a strange difference in shape: some are quite white, minutely dotted with black—a variety which, a few years ago, was passed off by the dealers for the egg of the Avocet. Some have their surfaces thickly blotched nearly all over with deep shades of brown. Many of them are as unlike each other, or the characteristic eggs of the species, as they well can be.





*GRALLATORES.**CHARADRIIDÆ.*

## TURNSTONE.

STREPSILAS INTERPRES.

PLATE LXXI.

I HAVE never heard of an instance of the Turnstone breeding upon the British Islands, although led to expect it from having at various times seen several of the birds upon the Northumberland coast, and also upon the Shetland Islands during the months of summer; these are, however, usually in small flocks, and most probably yet immature. It was, therefore, with peculiar pleasure that we discovered its retreat upon the coast of Norway, during a bird-nesting excursion to that country, for the purpose of adding rarities to my late work.

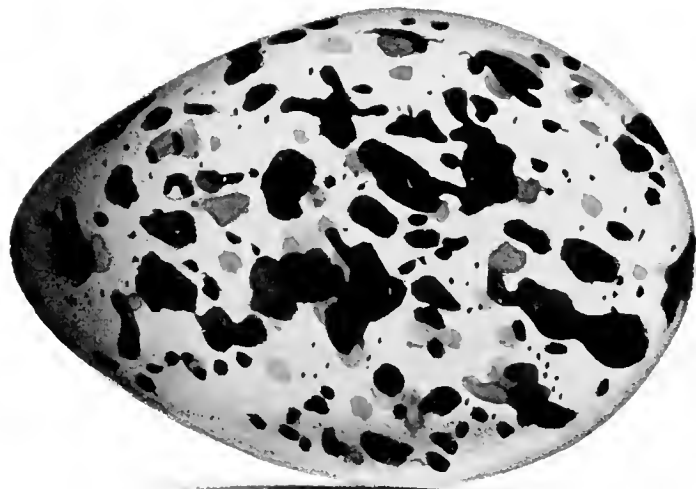
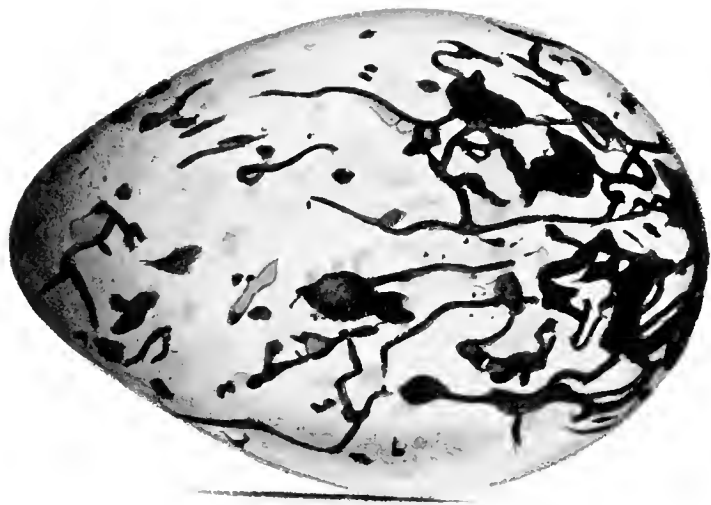
We had visited numerous islands with little encouragement, and were about to land upon a flat rock, bare except where here and there grew tufts of grass, or stunted juniper, clinging to its surface, when our attention was attracted by the singular cry of a Turnstone, which, in its eager watch, had seen our approach, and perched itself upon an eminence of the rock, assuring us, by its querulous oft-repeated note and anxious motions, that its nest was there. We remained in the boat a short time, until we had watched it behind a tuft of grass, near which after a minute search we succeeded in finding the nest: it was placed against a ledge of the rock, and consisted of nothing more than the dropping leaves of

the juniper bush, under a creeping branch of which the eggs, four in number, were snugly concealed and admirably sheltered from the many storms by which these bleak and exposed rocks are visited, allowing just sufficient room for the bird to cover them.

We afterwards found several more nests with little difficulty, although requiring a very close search. In sailing amongst the many islands with which this coast is everywhere studded, we had no difficulty in ascertaining those on which we should prove successful, and were frequently led to the spot from a distance by the extreme anxiety and pugnacity evinced by this bird in its attacks upon the larger sea-fowl, especially Richardson's skua, the egg-devouring enemy of other sea-birds. The several nests that we examined, with the exception of two, were placed in similar situations to the one described; one of these was under a slanting stone, the other without any covering whatever upon the bare rock. They all contained four eggs; some of them more pointed, and less suffused with colour than the Plate; some much like eggs of the common snipe; but all having a beautiful tint of purple or crimson seen in few other eggs.







*GRALLATORES.**CHARADRIIDÆ.*

## OYSTER-CATCHER.

SHELDER, SEA-PIE.

HEMATOPUS OSTRAGELUS.

PLATE LXXII.

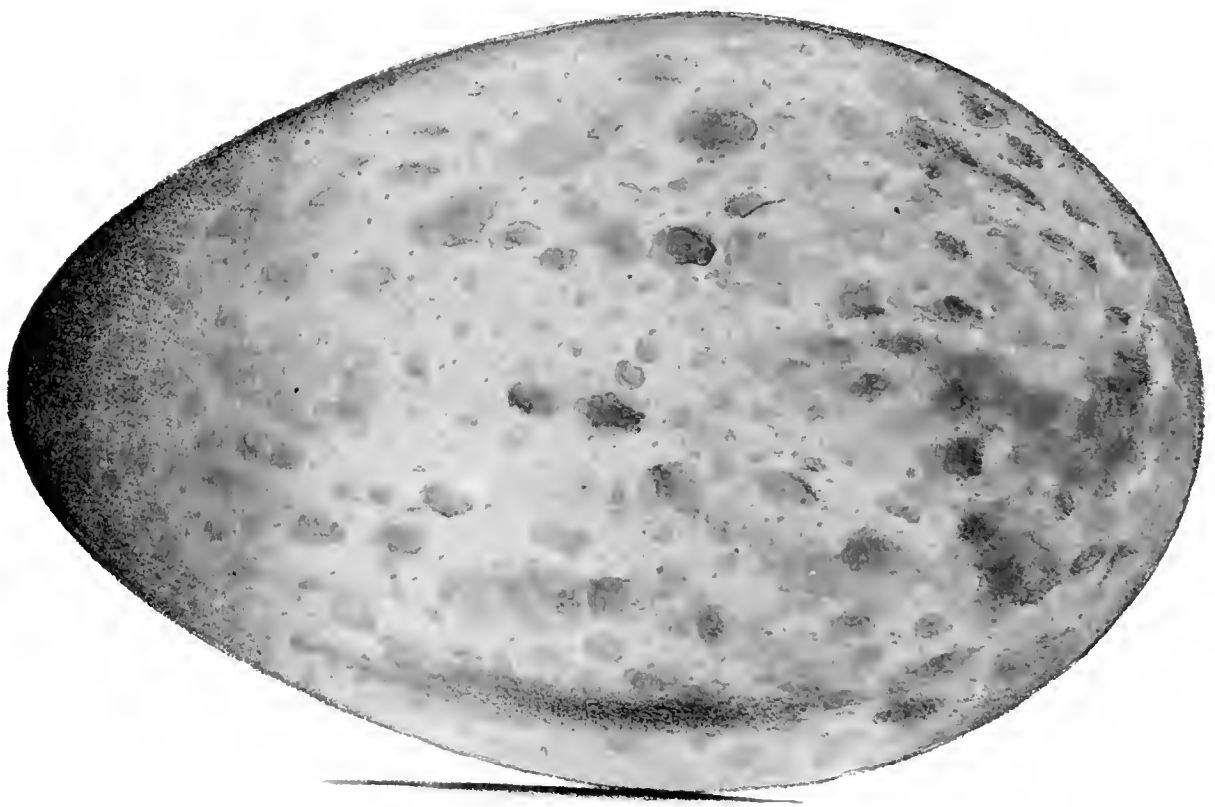
THE OYSTER-CATCHER breeds on many parts of our shores, in Norfolk, on the Fern Islands on the coast of Northumberland, becoming more plentiful as we go farther north, and is numerous on most of the Shetland Islands. Mr. Yarrell mentions many instances of its breeding, also, several miles inland: Mr. Grant, a correspondent of Mr. Yarrell's, mentions having found the eggs of the Oyster-Catcher in Scotland, as early as April; I have never found them earlier than the end of May, but more frequently during the month of June; whilst in Shetland, I met with many quite fresh, as late as July; we must therefore conclude that they are double-brooded.

The Oyster-Catcher is very particular in the selection of a situation for its eggs, always making choice of a piece of gravel, or stony ground, if to be met with near; more especially should it be mixed with broken shells, to which it shows a curious partiality, carefully collecting them together, and arranging them in a slight hole in the ground; and when these are not to be found, selecting in their stead small flat pieces of stone. Simple and hard though the materials be which compose its nest, it is as particular in the arrangement

of them, as many of our smaller birds are in the softer and more luxurious composition of their neat and beautiful abodes. Whether the position for the egg is chosen upon the pebbly beach, or upon the harder surface of the rock, it is always carefully strewed with these small flat pieces of shell or gravel: the whiter they are, the better they seem to please the taste of the architect, which seems, however, to experience some difficulty in placing them to its liking, and prepares numerous nests before it makes use of one; this I have always noticed with some wonder, and in some instances have seen as many as a dozen, all apparently as well-finished as the one which contained the eggs. Nothing can exceed the eager and anxious solicitude evinced by this bird, as you approach its nest: flying round and round you, it utters its loud and piercing cry, becoming more and more noisy as you near its nest. It lays three eggs: amongst a large number of the nests which I have seen, I never met with one containing more than three; Mr. Yarrell says that it lays four eggs, but I feel sure that he is under a mistake. The spotted variety of the Plate is more frequent than the other. The young birds run soon after they leave the shell, and are very active. On being pursued, they hide their little heads in the first hole, as a beaten fighting-cock will do, considering themselves safe when you are no longer visible. The down with which they are covered is beautifully mottled.



LXXII



*GRALLATORES.**GRUIDÆ.*

## CRANE.

GRUS CINEREA.

PLATE LXXIII.

WE should scarcely expect to find the eggs of the Crane so entirely different from those of all the other species which are most nearly allied to it in habit and in form. Whilst the eggs of all these species, with the exception of those of the spoonbill, are either pure white or slightly tinted with colour, but always spotless ; those of the Crane are, on the contrary, richly coloured, and very nearly resemble the eggs of the larger species of sea-gulls.

Dr. Thieneman says that the Crane makes its nest either upon a willow, or some other low bush,—or upon a large quantity of rushes, or other water-plants, in the midst of high grass or reeds ; that the nest is difficult to find, owing to its being almost always surrounded by bog or water, and to the precaution adopted by the bird, which on leaving it, does so in a stooping position, often creeping along for a great distance, before it becomes visible by flight.

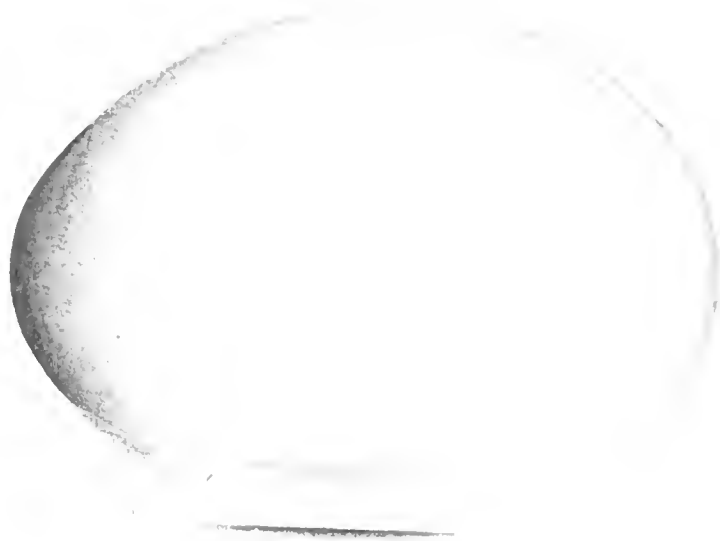
The Crane, like the stork, makes a large and bulky nest of sticks, dried grass, and other soft materials ; like it too (so Mr. Yarrell tells us) it sometimes elevates its nest on the top of some old building. It lays two eggs.

It is a little singular that the Crane, the stork, and the heron, should each at times choose such very opposite situation for their nests. All are known to breed upon the ground, the heron seldom ; and all make choice of more elevated sites as well.









*GRALLATORES.**ARDEIDÆ.*

## HERON.

*ARDEA CINEREA.*

PLATE LXXIV. FIG. I.

I HAVE often been surprised by observing the Heron, during the time of the breeding season, passing over those parts of the country which I knew to be very far distant from any heronry, especially when I have noticed its heavy flight and slow progress homeward. It is wonderful to what long distances they will patiently wing their way in their excursions in search of fish.

Nothing can be more ornamental to a gentleman's grounds than the presence of these elegant and graceful birds. Mr. Yarrell has given a list of the chief heronries in this country.

Like the rooks, the Herons breed together, sometimes in large communities, building their nests in clusters at the tops of the highest trees : they are known, also, to breed upon the cliffs of the sea-coast near Holyhead, and at Great Orme's Head ; and, in a few instances, their nests have been met with, like that of the crane, upon the ground. They are large, and composed of a quantity of sticks lined with dry grass, wool, and other soft materials, and contain four or five eggs.

Thieneman, in his work on the eggs of European Birds,

has figured one of this species which is spotted. The Messrs. Luke have also sent me one, bearing several rust coloured marks, which, though not to be washed out, have more the appearance of a vegetable stain, produced by the materials of the nest, than by an animal matter from the bird.

*GRALLATORES.**ARDEIDÆ.*

## PURPLE HERON.

*ARDEA PURPUREA.*

PLATE LXXIV. FIG. II.

WITH the exception of the common heron, this beautiful tribe of birds has but little claim to be accounted British, all of the species being very rare visitants of our shores. From the late Mr. Hoy, who was an eye witness of its habits, I have the following information regarding the present species.

“The Purple Heron does not begin to breed so early as the common heron, the end of May being the time of incubation; it is of a shy and retired disposition, keeping for the most part amongst reeds and woody swamps. It has much the habits of the bittern, and, when standing on the watch for its prey, has, at a little distance, something the appearance of that bird, with the neck very much bent and drawn in between the shoulders. They breed in society, like the common heron, very frequently in low trees, in plantations of alder and willow in the vicinity of rivers and large inland waters, the nests being only a few feet above the ground, upon which they are likewise sometimes placed, in swamps overgrown with tall rushes, and in extensive tracts of reeds; they are large and flat, and are either composed entirely of sticks finer towards the inside, or lined with species of dry sedge and rushes. The eggs are commonly four, rarely five in number, and differ considerably in size and shape, as well as in colour,” some being considerably darker than the Plate.

*GRALLATORES.**ARDEIDÆ.*

## NIGHT HERON.

*ARDEA NYCTICORAX.*

PLATE LXXIV. FIG. III.

THE NIGHT HERON, though rarely to be met with in this country, is not unfrequent on some parts of the Continent, and is abundant in America, as will be seen by the interesting account which I have copied from the third volume of Audubon's Ornithological Biography.

“ This species breeds in communities around the stagnant ponds, either near plantations, or in the interior of retired and secluded swamps, as well as on some of the sea islands covered with evergreen trees. Their Heronries are formed either in low bushes, or in middle-sized or tall trees, as seems most convenient or secure. In the Floridas they are partial to the mangroves that overhang the salt water; in Louisiana they prefer the cypresses, and in the middle states they find the cedars most suitable. In some breeding-places within a few miles of Charleston which I visited, the nests were placed on low bushes, crowded together, some within a yard of the ground, others raised seven or eight feet above it, many being placed flat on the branches, whilst others were in the forks. Hundreds of these might be seen at once, as they were built on the sides of the bushes fronting the water. Those which I found in the Floridas were all placed on the south-west side of mangrove islands, but were farther apart

from each other, some being only about a foot above high-water mark, while others were in the very tops of the trees, which, however, scarcely exceeded twenty feet in height. In some inland swamps in Louisiana, I saw them placed on the tops of tall cypress trees, about one hundred feet high, and along with *Ardea Horodias*, and *Ardea Alba*."

I have felt myself compelled in this instance to deviate from the arrangement of Mr. Yarrell, for I cannot see any sufficient reason why this bird should be separated from those species to which it is so intimately allied.

*GRALLATORES**ARDEIDÆ.*

## GREAT WHITE HERON,

GREAT EGRET.

ARDEA ALBA.

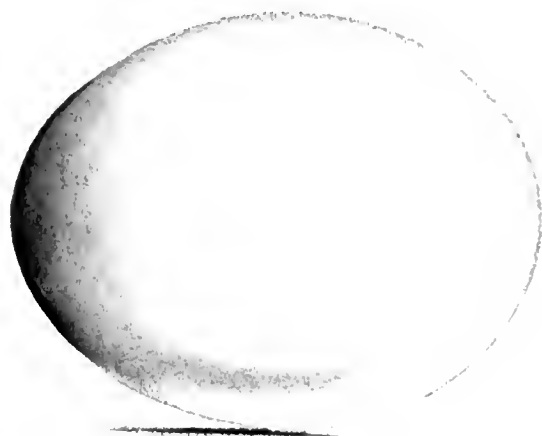
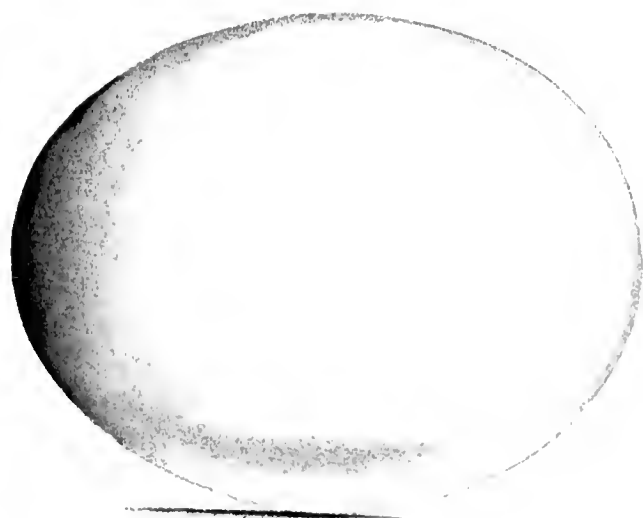
PLATE LXXV. FIG. I.

I copy from Audubon's Ornithological Biography the only account which is to be had, with regard to the nest and eggs of this species.

“The Great Egret breeds along the shores of the Gulf of Mexico, and our Atlantic States from Galveston Island in the Texas, to the borders of the state of New York. In all low districts that are marshy and covered with large trees, on the margins of ponds or lakes, the sides of bayous or gloomy swamps covered with water, are the places to which it generally resorts during the period of reproduction; although I have in a few instances met with their nests on low trees, and on sandy islands at a distance from the main land.

“The nest of the Great White Egret—whether placed on a cypress a hundred and thirty feet high, or on a mangrove not six feet above the water; whether in one of those dismal swamps swarming with loathsome reptiles, or by the margin of the clear blue waters that bathe the keys of Florida—is large, flat, and composed of sticks, often so loosely put together as to make you wonder how it can hold, besides itself,







the three young ones which this species, and all the large Herons, have at a brood.

“It almost always overhangs the water, and is resorted to and repaired, year after year, by the same pair.

“The eggs are never more than three in number.”

*GRALLATORES.**ARDEIDÆ.*

## LITTLE EGRET.

ARDEA GARZETTA.

PLATE LXXV. FIG. II.

THE LITTLE EGRET has been allowed a place in the lists of our British Birds, from but slight authority. It appears also to be an uncommon bird on the Continent of Europe.

I am sorry to say that I have no very satisfactory proof of the identity of the egg now figured, but have been induced to draw it upon rather insufficient authority, and contrary to my usual practice, from a conviction that if it is not in reality the egg of this species, it must bear a very close resemblance to it.

The Little Egret no doubt breeds in trees, like the preceding species, probably sometimes also in marshy districts on the ground. It is said to lay four or five eggs.





*GRALLATORES.**ARDEIDÆ.*

## LITTLE BITTERN.

BOTAURUS MINUTUS.

PLATE LXXVI. FIG. 1.

AMONGST the many examples of the Little Bittern which have occurred in this country, there is a stuffed specimen, together with its eggs, in the Museum of the Natural History Society of Newcastle upon Tyne, which was formerly part of the Allan or Wycliffe Museum. From one of these eggs the accompanying drawing was copied; of their history I am sorry to say that I know nothing, but have very little doubt that they were taken in this country.

The Little Bittern is met with in various parts of Europe, inhabiting, like the other species, extensive marshy districts. It makes its nest upon large masses of broken reeds or rushes to raise it above the contact of the water, and forms it of a quantity of reeds, grass, and other herbage, laying from four to six eggs.

*GRALLATORES.**ARDEIDÆ.*

## BITTERN.

*BOTAURUS STELLARIS.*

PLATE LXXVI. FIG. II.

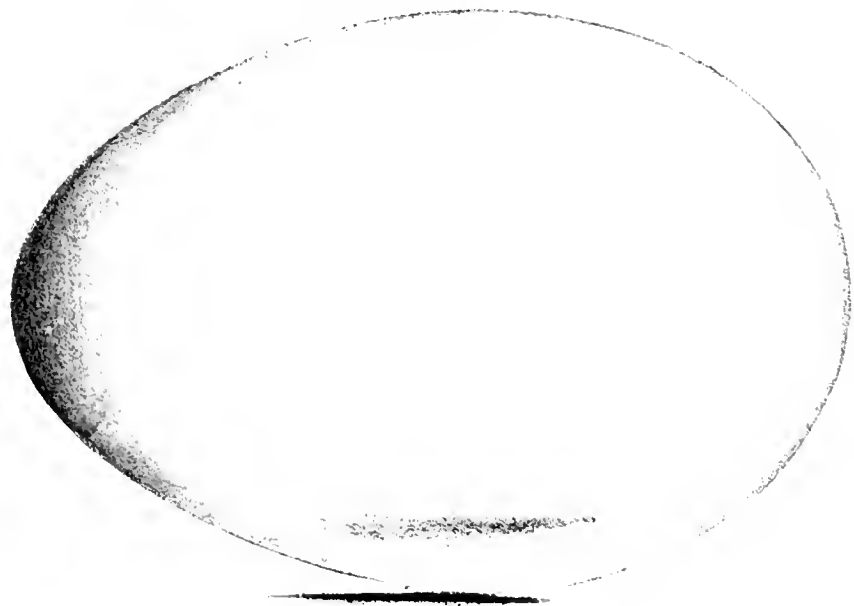
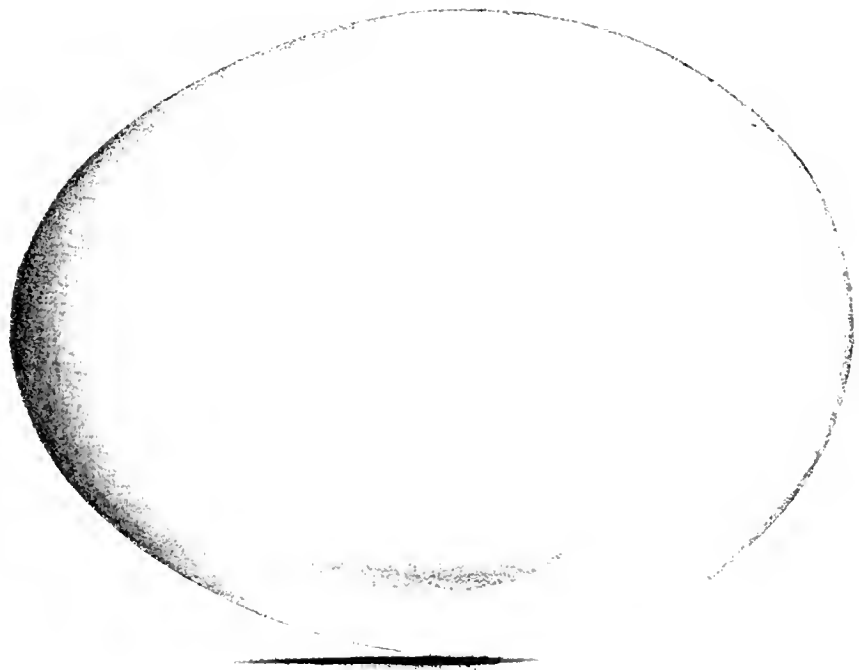
ALTHOUGH this beautiful and conspicuous bird might, at one time, have been met with in most of the marshy districts of this country, there are now no hopes that so large a bird will much longer remain a tenant of our land, or that it can escape the multitudes of idlers who infest the country carrying guns. The increase of population, and with it that of cultivation, and the enclosure of our waste lands, is daily decreasing, and will in a few years altogether exterminate, these wild tenants of the waste. Mr. Wolley tells me that men now living have shot them in abundance in the fens of Cambridge. Mr. Eyton mentions two instances in which the Bittern has been known to breed in Shropshire, and Mr. Fisher of Yarmouth has an egg taken at Ranworth in Norfolk.

The Bittern makes its nest in the heart of fens and almost impenetrable marshy districts; and, according to Dr. Thieneman, is careful to raise it beyond the effects of any temporary rising of the water, by placing it upon a mass of fallen reeds and prostrate rushes. The nest is formed of reeds, rushes, and grass, with occasionally a few sticks, slightly hollowed for the reception of the eggs, and sometimes lined with the cotton of the reed. The eggs are from three or five in number; the time of incubation the month of May.





LXXVII



*GRALLATORES.**ARDEIDÆ.*

## STORK.

CICONIA ALBA.

PLATE LXXVII. FIG. I.

No one can have travelled through Germany, in the summer season, without having had their interest excited by observing this, the favourite bird of the country. In Holland, Belgium, and the German States, the Stork not only meets with the kind protection afforded to all the feathered race, but is courted with a cherished and superstitious welcome, which seems to elevate it to a place amongst the household gods of the people. Invitations are held out to it by the inmates of the different villages to make their house its home; baskets of wire-work, and boxes of wood, are erected on the roofs of some of the houses for the reception of its nest; and happy, and in good luck, is that person accounted, whose roof-tree becomes the object of their choice. It is a beautiful sight to watch these graceful birds, when they have young ones, standing, as is frequently their wont, statue-like amongst them, and as immoveable as if they formed a part of the building.

In a ride during the last summer from Frankfort to Heidleberg, through the well-known Bergstrasse, we seldom passed through one of the numerous villages on our way without observing several of the nests of this species; indeed, it would have been difficult to pass them by unseen, occupying, as they do, the most conspicuous places near.

They are for the most part placed on the top of one of the chimneys, sometimes on the very ridge of the roof, when they require a much larger quantity of materials than common to fill up the slopes on each side.

We were agreeably surprised upon looking from the windows of our sleeping-room, high up in one of the hotels in the town of Frankfort, to observe a Stork upon its nest on one of the neighbouring chimneys, still much higher than we were. It was the first that we had seen, and so much delighted one of my companions, that he declared himself more pleased with it than with any other incident of our tour. The nest of the Stork is occasionally placed at the top of a church-tower. Mr. Hoy, who has seen them upon a cart-wheel, elevated on the end of a long pole, placed for their reception, says, that they also, though seldom, build in lofty trees.

Storks begin to appear about their breeding-places in the middle of March, unless the season is very cold and backward. The nest, in consequence of its accumulating from year to year, becomes very large; it is composed externally of sticks, smaller towards the inside, and is sometimes lined with pieces of wool or the dry stems of plants mixed with the smaller sticks. The eggs, which are originally white or slightly tinted with cream-colour, soon become soiled and dirty: they are three or four in number; Mr. Hoy says, rarely, if ever, five.

*GRALLATORES.**ARDEIDÆ.*

## BLACK STORK.

CICONIA NIGRA.

PLATE LXXVII. FIG. II.

THE BLACK STORK, though met with here and there, through most of the countries of Europe, appears to be nowhere common. It is known to breed occasionally in some of the German States. Mr. Sewell, who lives near Newcastle-upon-Tyne, has one alive, which he received when young; taken from the nest near Rostock in the Duchy of Mecklenberg.

Whilst the commoner bird seeks the society of man, and repairs to towns and villages to rear its young ones, the Black Stork betakes itself to the distant forest, wherever it is interspersed with streams and pools of water or marshy flats. There, towards the end of April, it builds its nest in solitude near the top of one of the highest trees of the forest; for the most part upon that of the pine tree.

The nest, though large, is less than that of the other species; its foundation of sticks is rendered more firm and stable by the addition of sods of earth, the remainder of the nest being completed with finer sticks.

The eggs are four in number, and, like those of the white stork, but smaller; there are specimens in the collections of the Messrs. Tuke, and of the Yorkshire Philosophical Society, and as the names are written on them in the German character, there can be little doubt of their identity.





LXXV





*GRALLATORES.**ARDEIDÆ.*

## SPOONBILL.

PLATALEA LEUCORODIA.

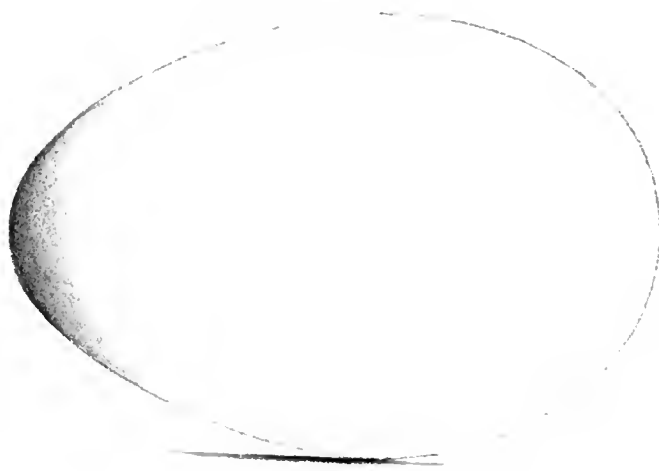
PLATE LXXVIII.

THE SPOONBILL at one time reared its young ones in this country, and would do so again with many other species of birds, were it not for the extermination which awaits them as soon as they touch our inhospitable shores. It is a common bird on many parts of the Continent, where it breeds, but especially in the low marshy grounds of Holland. It will, at one time, build its nest upon the tops of the highest trees of the neighbourhood; and at another, place it, like the stork and the heron, upon the ground. When the nest is built in trees, it is composed of sticks lined with finer materials; when upon the ground, surrounded as it always is by swamp and water, it is formed of large masses of reeds, rushes, and tufts of grass, to raise it above the influence of the wet. The Spoonbill breeds in the month of May, and lays three or four eggs; which are sometimes, though rarely, without any of the red spots.





LXXVIII.\*



*GRALLATORES.**ARDEIDÆ.*

## GLOSSY IBIS.

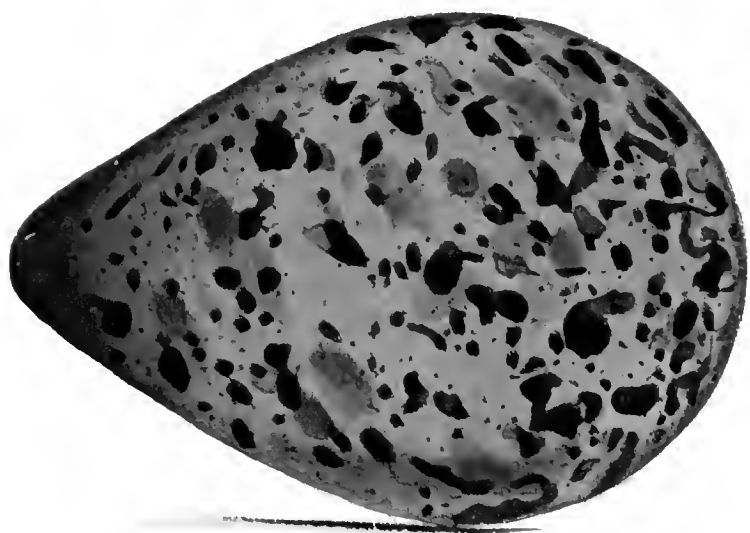
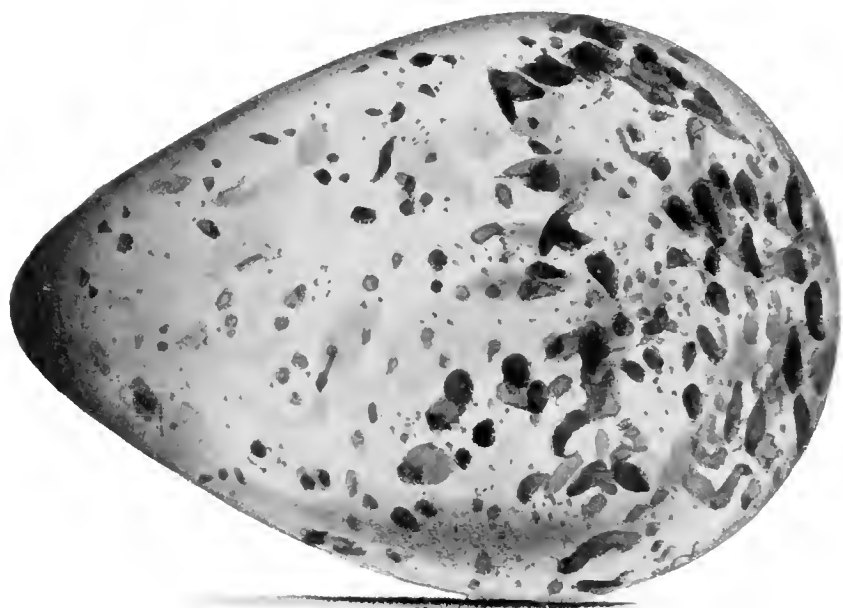
IBIS FALCINELLUS.

PLATE LXXVIII.\*

ALTHOUGH several eggs, said to be those of this species, have been added to our collections, I was unwilling to figure one from authority which appeared to me insufficient to warrant their being genuine, until they were pronounced to be so by Dr. Thienemann during a visit to this country. They have none of the characters of the eggs of the Scolopacidæ, which one would look for in the eggs of a bird so closely connected with them, with the exception of sometimes tapering to the smaller end rather more than the eggs of the Ardeidæ; whilst on the other hand, where one would not expect to see much likeness, they closely resemble those of the Heron tribe. Mr. J. Hancock, however, who has observed the living Ibis, tells me that they are very heron-like in some of their habits, and the positions in which they put themselves; the Ibis, it has also been said, breeds in trees like the heron. The figure is from an egg in the collection of Mr. Wilmot.









*GRALLATORES.**SCOLOPACIDÆ.*

## CURLEW.

## NUMENIUS ARQUATA.

PLATE LXXIX. FIG. I.

I HAVE never traversed the lone wild heath, deserted, except by the feathered race, and at a moment in which I have felt the solitary dreariness of the scene, that the wild cry of the Curlew, so much in accordance with all around me, has not come like the voice of a companion to my ear, and produced a delightful feeling of gratitude to that Being who has thus adorned with life and beauty the most sterile and least interesting of his works ; and I have thought how great would be the void in the creation, were we deprived of this one branch of his glorious productions. It is upon such wild and deserted districts, together with downs and open sheep-walks, especially in places which are wet and marshy, that the Curlew breeds ; its nest, when any, consists of a few pieces of dried grass collected together in a hollow in some tuft of the same material : the eggs, which are four in number, and cannot be mistaken for those of any other species, differ a good deal in the depth of the ground colour, and also in the frequency of the spots. The plate represents a light variety of the egg of this species, and a dark one of that of the whimbrel, as each of these varieties occur amongst the eggs of both species. The eggs of the Curlew are not, however, of so rich and beautiful a green as those of the whimbrel.

Whilst in Norway, we were much amused with what appeared to us to be quite a new and unnoticed habit amongst the Grallatores or wading birds. One day eagerly pursuing a bird of this family, and having searched in vain a marsh towards which it had flown, we were about to relinquish the pursuit, when, much to our amazement, we discovered it above our heads, perched upon the top of a high tree. So contrary was this to any of the habits of this class of birds with which we were then acquainted, that we concluded that it must be a species unknown to us ; we afterwards found it, however, to be a practice by no means uncommon with the redshank and the greenshank to settle upon trees : and, what surprised us more than all, was to see the long-legged Curlew alight, as it frequently did, on the top of the highest trees of the pine forest, and to hear it, as it passed from tree to tree, utter its loud clear whistle. The Curlew breeds in April and May, and lays a surprisingly large egg.

GRALLATORES.

SCOLOPACIDÆ.

## WHIMBREL.

NUMENIUS PHŒOPUS.

PLATE LXXIX. FIG. II.

THE WHIMBREL, like the closely allied species, the curlew, breeds in those wild desolate districts which are usually far distant from human habitation, on open moors, and uncultivated wastes ; choosing in preference those which are wet and marshy and composed of moss and that black peaty soil which is, in such places, a substitute for coal.

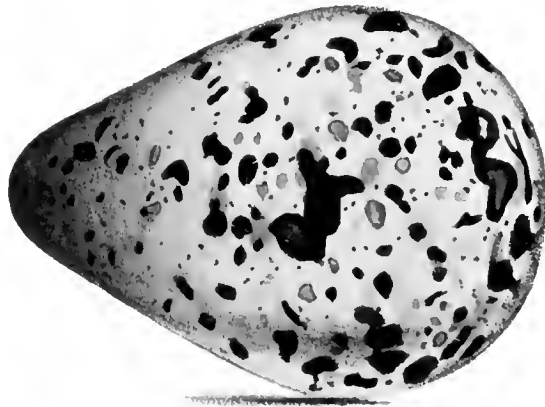
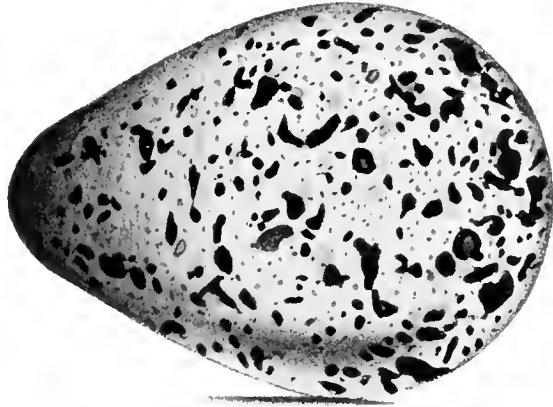
The Whimbrel is a rare bird throughout the British islands during the months of summer. Mr. Salmon says that it breeds in Orkney, but he did not meet with its nest during his visit to those islands. We had great difficulty in obtaining the eggs in Shetland ; and, although we traversed and diligently examined most of the islands of the group, we only met with them upon two of them, those of Yell and Hascosea,—but these in very small and rapidly decreasing numbers, for there even the eggs, like those of the peewit farther south, are gathered for the delicacy of their flavour. We met with the eggs of this species upon one of the larger islands, which we visited, on the coast of Norway.

The nest of the Whimbrel is nothing more than a slight depression in the surface of the ground. The eggs, like those of all the allied species, are, I have no doubt, four in number. None of those nests which I have myself examined, contained

more than three ; but as these were all quite fresh, the number was most probably yet incomplete. The egg of the curlew, which is figured in the same plate, may represent very well a light variety, which sometimes occurs amongst those of the Whimbrel. Most of those eggs which pass through the hands of the dealers as belonging to this species, are nothing more than those of the *Lestris Richardsonii*, which are much easier to procure ; they may be generally known by their want of breadth, and by the colouring and character of the spots, which are easily detected by a practised eye, but very difficult to describe.



LXXX



*GRALLATORES.**SCOLOPACIDÆ.*

## REDSHANK.

TOTANUS CALIDRIS.

PLATE LXXX.

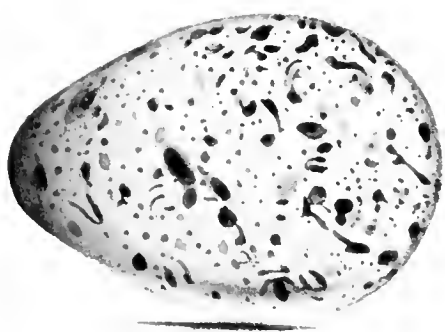
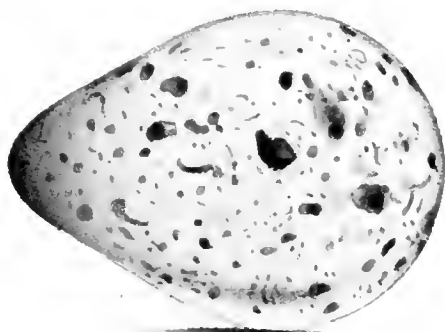
LIKE the snipe, the Redshank breeds in uncultivated marshy wastes; it is most common in the extensive fenny districts of the counties of Cambridge and Lincoln; a few pairs are, however, dispersed throughout the country, an occasional nest being found on several of the wet heathy moors of the North of England, and in various parts of Scotland. The nest is nothing more than a few dry grasses, placed in a depression on the ground, or in a tuft of herbage, and in the near neighbourhood of water. The Redshank lays four eggs, much like those of the peewit in size and general appearance, but almost always easily known from them by the lighter and warmer tint of the ground colour, by the smallness, greater number and lighter colour of the spots, as well as by a difference of shape. Eggs of this species are broader in proportion to their length, and taper with less curve from the widest part to the smaller end. Some varieties are beautifully marked with large blotches of bluish grey.







LXXXI



*GRALLATORES.**SCOLOPACIDÆ.*

## WOOD SANDPIPER.

TOTANUS GLAREOLA.

PLATE LXXXI. FIG. I.

FOR the following interesting particulars of a bird little known, together with a specimen of its egg, I am indebted to the assiduity of Mr. Hoy.

“This species is migratory, retiring in September, and making its appearance early in April. That it breeds rather early, I infer from having met with the young feathered and capable of flying a short distance on the 11th of June. I regret that I did not discover the bird till late in the season.

“A great portion of Dutch Brabant, more particularly the southern and eastern parts, are covered by large tracts of heath, the soil of a light sandy nature. A great number of peat-bogs, and shallow pools of water, are dispersed over this district. Most of the small streams are skirted by swampy ground, where the bog-myrtle grows in the greatest luxuriance, with stunted bushes of alder and willow. These situations are the favourite haunt of this Sandpiper during the breeding-season. While the hen bird is sitting, the male flies round in wide circles, and at a considerable elevation. The female sits close, and the nest is extremely difficult to find.

“If you approach the spot when they have young, and especially if a dog is with you, the old birds will fly round

in the most anxious manner, and will hover over the dog within a few feet; then suddenly darting off, mount high into the air, pouncing down again with great rapidity on the intruder. If you have observed the actions and manœuvres of the redshank during the breeding-season, you will have seen very much the habits of the Wood Sandpiper.

“It is far from being numerous in the localities where I met with it, yet many pairs are dispersed over these districts, where they have long been known to breed, from information which I obtained from several intelligent sportsmen, to whom the bird was well known. Although I met with the young in the downy state, and partially feathered, I only obtained one nest with eggs.

“The nest is generally placed at a short distance from the water among stunted heath, or scrubby plants of the bog-myrtle, or among coarse grass and rushes. It is placed in a hollow, and is of dry grass and other plants. The eggs are four in number.”

*GRALLATORES.**SCOLOPACIDÆ.*

## COMMON SANDPIPER.

SAND LARK.

TOTANUS HYPOLEUCOS.

PLATE LXXXI. FIG. II.

THE COMMON SANDPIPER frequents almost every river, skimming over the surface and uttering its sweet melancholy whistle. It lays its eggs either amongst the large dockens that grow upon the banks, or upon the beds of gravel by the margins of the stream. In the former situation, where there is apparently less need, it makes a slight nest by collecting a little dry grass, and placing it in a hole scratched for that purpose; in the latter none; contenting itself by placing its eggs in a slight depression amongst the gravel. Here it is, however, by no means easy to discover them, placed as they are amongst the small pebbles; and here instinct has taught the birds that a collection of grass where none grows, would only lead to the detection of their eggs. I have found them upon the bare flat rock, where nothing but a very slight inequality in the surface kept them in their places.

The Common Sandpiper breeds about the middle of May, and lays its four large eggs, admirably adapted, as I have before mentioned, when speaking of the eggs of the waders, both by their form and position in the nest, so as to occupy the least space possible, and be the more easily covered by the bird; and it will be seen how necessary this arrange-

ment is, when we take into consideration the magnitude of the egg, and the small size of the bird, which is not a great deal larger than the skylark.

In consequence of the very large size of the eggs of most of the grallatorial birds, the young ones have room for growth, and come forth in a much less helpless state than the progeny of the incessorial birds: they are thus able to get out of danger, which is much more imminent upon the ground, than when snugly covered by the foliage of a tree, and to run quickly to avoid it almost as soon as they are hatched.

Although, in general, the eggs of this Sandpiper do not differ much, there are yet some beautiful varieties; some of those in the collection of Mr. Hancock, are of a clear but very light-blue ground colour, with minute brown spots all over; others have the warm colouring of the Plate, but much darker; and a few have large blotches of deep brown and neutral tint.

*GRALLATORES.**SCOLOPACIDÆ.*

## SPOTTED SANDPIPER.

## TOTANUS MACULARIUS.

PLATE LXXXI. FIG. III.

AMERICA seems the favourite resort of this species, which, according to Wilson, is met with on the shores of most of the large rivers, creeks, and streams of Pennsylvania, and is in great abundance along the rivers Schuylkill and Delaware, and their tributary waters. He says, "About the middle of May they resort to the adjoining cornfields to breed, where I have frequently found and examined their nests. One of these now before me, and which was built at the root of a hill of Indian corn on high ground, is composed wholly of short pieces of dry straw. The eggs are four. The young run about with wonderful speed as soon as they leave the shell, and are then covered with down of a dull drab-colour marked with a single streak of black down the middle of the back, and with another behind each ear."

The egg figured, is in the collection of Mr. Charles Adamson, of Newcastle, and was given him by Mr. Audubon.

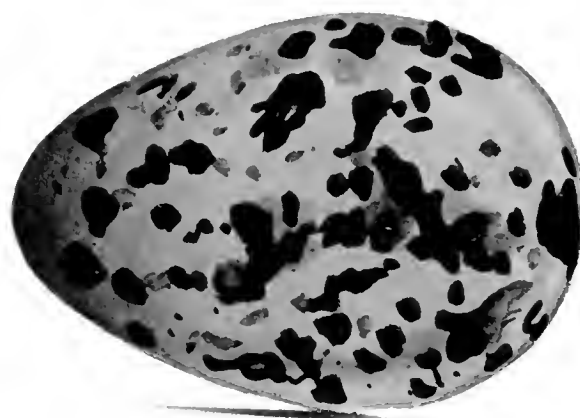
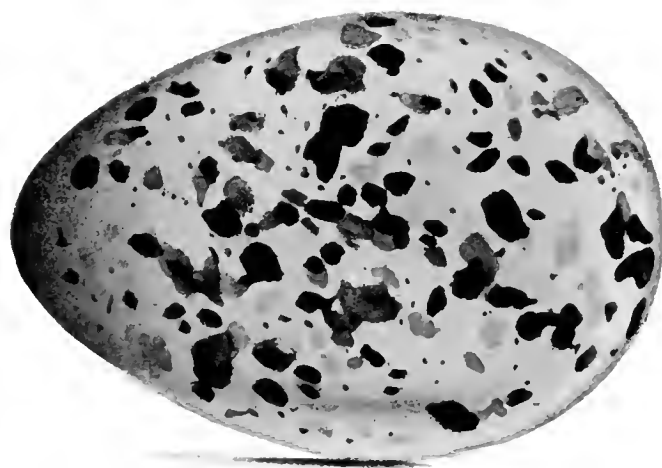
Most of the eggs of this species which I have seen, bear very slight resemblance to those of any of the other Sandpipers. In form, they want the pear-shaped character of the eggs of the other waders.







LXXXII



*GRALLATORES.**SCOLOPACIDÆ.*

## AVOCET.

## RECURVIROSTRA AVOCETTA.

PLATE LXXXII. FIG. I.

SOME twenty or thirty years ago when bird-collectors were less numerous and guns were more expensive and therefore more difficult to procure, the Avocet was one of the rare birds that used to breed occasionally in some of the marshy districts of this country. It is said to have been found during the breeding-season in Lincolnshire and in Kent, and the Messrs. Paget, of Yarmouth, have seen it together with its young ones in the county of Norfolk. It is, however, too singular and remarkable a bird to remain now unmolested in any part of this country ; and if not already, will soon be amongst the list of those birds which were once, but are now no longer indigenous with us.

It is said that the Avocet usually lays two eggs, and sometimes, though rarely, three, which are deposited in a slight depression of the surface, either upon the bare ground, or on a small quantity of dry grass. They are readily known from those of the waders most nearly allied to them, by their greater size, and by their difference of contour and colouring. As the Avocet usually lays two eggs only, it was unnecessary that they should possess that pointed form which enables the four eggs of the other species to pack so closely. Some specimens are larger than those of the plate, and more irregularly and closely covered with unequal blotches of colour, and a good deal like those of the peewit. Some years ago, a very light and singular variety of the egg of the peewit—the ground colour nearly white with small black spots,—was in collections as that of the Avocet.

*GRALLATORES.**SCOLOPACIDÆ.*

## BLACK WINGED STILT.

LONG-LEGGED PLOVER.

HIMANTOPUS MELANOPTERUS.

PLATE LXXXII. FIG. II.

THIS bird, like the one just described, is too singularly conspicuous to remain long alive on its visits to this country ; and though, was it to consult its own choice, it would probably remain with us to breed, we can scarcely hope that it will ever be permitted to do so.

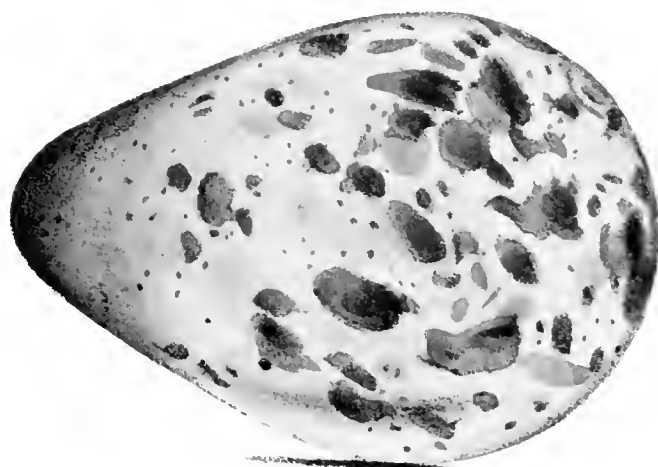
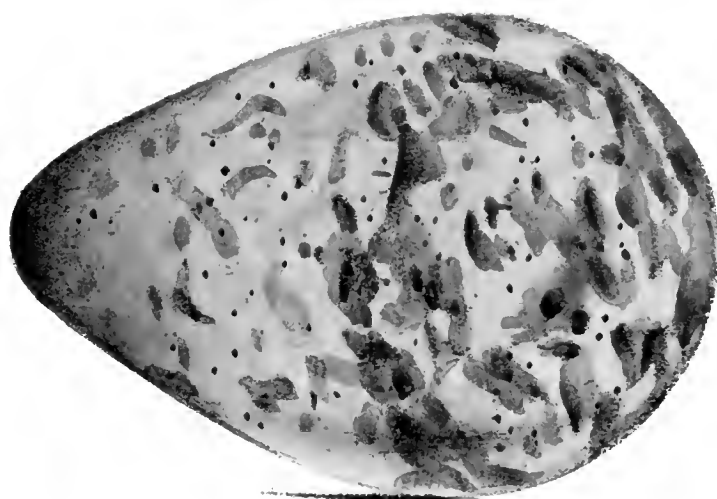
During the spring of 1826, my correspondent, Mr. Salmon, whose collection of eggs forms so attractive an object in the Norwich Museum, shot a pair of these birds at Stoke Ferry, in Norfolk, from the female bird of which he extracted eggs in a state of forwardness.

The only egg which, to my knowledge, is in any of the cabinets of this country, is the one which I have drawn from the collection of Mr. John Hancock, of Newcastle. It is altogether different in form and colour from the figure given by Dr. Thieneman ; it was, however, sent to Mr. Hancock by one of his correspondents in the south of France, upon whom he places reliance. I have not, therefore, much hesitation in drawing it,—and the less so, since the egg is unlike that of any other species.

The long-legged plover frequents the margins of lakes, and lays its eggs upon the ground : they are said to be four in number ; but I greatly doubt that they are ever so numerous.



LXXXIII



*GRALLATORES.**SCOLOPACIDÆ.*

## BLACK-TAILED GODWIT.

LIMOSA MELANURA.

PLATE LXXXIII.

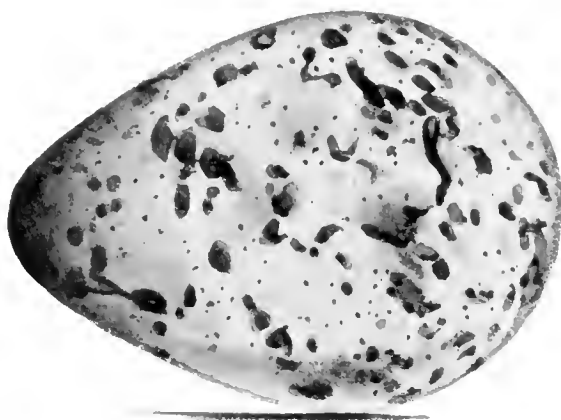
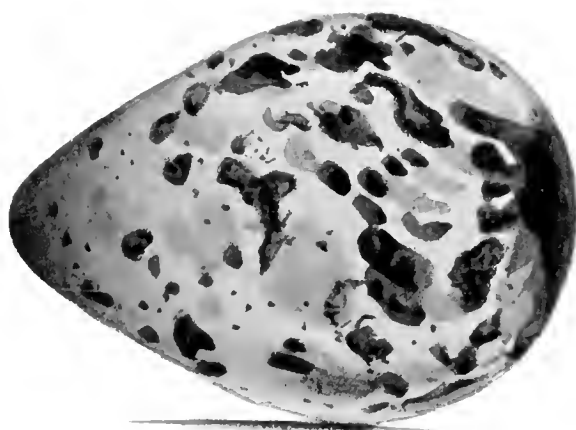
THE BLACK-TAILED GODWIT breeds occasionally, though sparingly, in the fens of Cambridgeshire, and some of the marshy districts of Norfolk, and in situations similar to those which are chosen by the ruff. They arrive in March, and commence early in May to lay their eggs, which are four in number, and, as will be seen by the plate, differ considerably in size and colouring; the light variety, which is from the collection of the Messrs. Tuke of York, is of rare occurrence, and has been supposed by some to be the egg of the other species, the bar-tailed godwit. There are other varieties with a much lighter ground-colour than the first figure, and with the surface sprinkled with small, but distinctly marked spots. Mr. Hoy informed me, in a letter which I received from him on his return from the continent in 1836, where he had seen a great variety of the eggs of this species, that some of them had scarcely any perceptible markings; that the nest of the Black-tailed Godwit is composed of dry grass and other vegetables, and is concealed amongst the coarse herbage of the swamps and low meadows; and that the birds, when disturbed, are clamorous, flying round the intruder and vociferating the cry of "grutto, grutto, grutto," from which cry they have received their name among the country people in Holland.







PLATE



*GRALLATORES.**SCOLOPACIDÆ.*

## RUFF. FEMALE. REEVE.

## MACHETES PUGNAX.

PLATE LXXXIV.

THE RUFF, which breeds in some of the fenny districts of Lincolnshire and Cambridgeshire, seems to prefer those of the most swampy nature, and covered with coarse grass, sedge, or other plants, many of them breeding together in the same marsh where such favourable situations occur, provided the cupidity of the fowlers, who snare them for the market, does not induce them to capture the females in the spring, and thus destroy their own future prospects of success. Montague says, however, that “few Ruffs, comparatively speaking, are taken in the spring, as the old birds frequently pine, and will not readily fatten. The principal time is in September, when the young birds are on the wing; these are infinitely more delicate for the table, more readily submit to confinement, and are less inclined to fight. If this plan was generally enforced by the proprietors of fen-land, or made a bye-law amongst themselves, the breed would not be so reduced: but there are still fowlers who make two seasons; and, by catching the old birds in the spring, especially the females, verify the fable of the goose and the golden eggs.”

The nest of the Ruff, which is placed upon some hillock or slight elevation in the marsh, is of the coarse grass by which it is surrounded. Montague says, “that the Reeves

begin to lay their eggs the first or second week in May ; and that he has found the nest with young ones as early as the third of June. It will be seen by the two figures of the plate, that the eggs of this species are subject to considerable variety. Mr. Henry Doubleday, of Epping, very kindly sent me a beautiful series of the eggs of this species, selected by himself from a large number in Leadenhall Market, to illustrate the former edition of this work ; and from these I have again selected for the accompanying plate, one of the most characteristic of the species, together with a variety. Mr. Doubleday says, “ that some of these eggs, when fresh, are of a beautiful clear green, which is peculiar to them : those like the first figure, have a resemblance to eggs of the great snipe, which they represent in several collections. Some of the varieties are a little like eggs of the redshank.



121



*GRALLATORES.**SCOLOPACIDÆ.*

## WOODCOCK.

SCOLOPAX RUSTICOLA.

PLATE LXXXV.

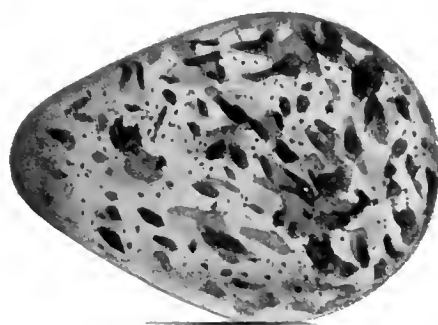
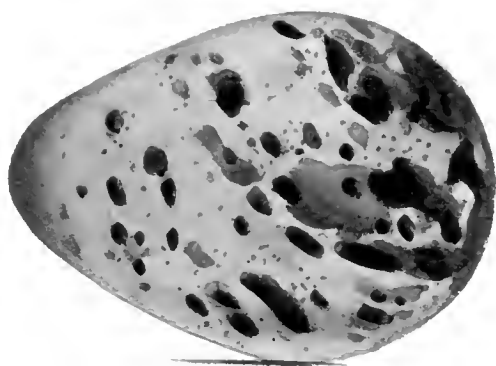
THE WOODCOCK has long been known to remain in this country to breed, but the recorded instances have been, till of late, few and far between. Within the last few years, however, many of their nests have been discovered, and there are few collections without English specimens of the eggs. Mr. Yarrell, amongst numerous instances in which the eggs or young ones have been met with, mentions two of peculiar interest, three or four nests having been found within a short distance of each other. He says, "The eggs, or young of the Woodcock have been found during one summer or another in almost every county in England, as well as in several of those of Scotland, and also more frequently of late years than formerly." Whether or not their more frequent occurrence may arise from the greater attention which has recently been given to Natural History, and the increasing interest felt in this particular department of it, or to the fact of a larger number of birds having become domiciled amongst us, I will not attempt to say. Not many years ago, when Mr. Bewick was engaged with those beautiful woodcuts which have given such celebrity to his name, the missel thrush, now everywhere common, was so rare, at least in the north of England, that he had some difficulty in procuring one from which to

illustrate his work. The Woodcock leaves us for Norway, a country where, during the breeding-season, the climate is very similar to our own. It enjoys there, it is true, its range through boundless forests; but in these, it chooses those places for its nest from which the trees have been cut down, on the outskirts of the forest, and bordering upon the cultivated districts, and the banks of rivers. Whilst there, I had the pleasure of taking its eggs, which were placed upon the bare ground under some brushwood, and in a place from which the timber had been cleared, and in which the young spruce fir-trees were again springing. When wandering through those endless pine-woods, it was a very rare occurrence to raise a Woodcock during the day-time; although in the evening, towards sunset, and for hours afterwards, numbers of them were constantly flying to and fro, over the trees of the forest, uttering a kind of chirping note. The Woodcock lays its eggs amongst the dry grass or dead leaves, which form the surface of the woods and plantations which it frequents. It is an early breeder, frequently having young ones in the middle of April. The eggs do not vary much, except in contour: they have none of the pearshaped character which distinguishes those of all the allied species; on the contrary, they are sometimes more remarkable for the roundness of their form. They are four in number.





(XXXXV)



*GRALLATORES.**SCOLOPACIDÆ*

## GREAT SNIPE.

DOUBLE SNIPE.

SCOLOPAX MAJOR.

PLATE LXXXVI. FIG. 1.

FROM a want of confidence in those specimens which, in collections, represent the eggs of this species, I have been led to figure again from the same specimen which formed one of the illustrations of the Oology. It was sent me by the late Mr. Hoy, with the following particulars :

“ There is no doubt, that by far the greater number of the Great Snipe retire to the swamps of the north to breed ; still, a considerable number are spread over the fens and morasses of Holland, and have hitherto escaped observation during the time of breeding. It may, however, be met with during that season, though not in great numbers, in the marshy districts lying between Gouda and Gorinchem, and an extensive fenny tract, abounding in peat-bogs, in the eastern part of Dutch Brabant. Bordering upon the Dutch side of the river Meuse is another locality, over which they are found scattered during the breeding-season. The Great Snipe resembles the jack-snipe very much in its habits, lying close, and, when disturbed, rarely flying far. It begins to breed early in May. The nest is similar to, and placed in the same situation as that of, the common species. The eggs are four in number.”

Mr. Yarrell says, “ From Mr. Dann I learn that the

Great Snipe breeds in considerable numbers in the mountainous parts of Norway and Sweden, as high as the range of birch-woods extend. In the Dovre-Field at Jerkin, and Fogstuen, they are numerous on the edges of the grassy swamps, avoiding the wet; they also frequently resort to the borders of the small rills used for irrigating the grasslands. Their nest is placed on a hummock or tuft of grass, near the willow bushes, on the borders of the swamps. Mr. Dann does not consider that the Great Snipe goes to the northward of Drontheim." We certainly saw but one of the genus, and that an example of the common species, in the whole district which we perambulated from Drontheim to within the Arctic circle.

*GRALLATORES.*

*SCOLOPACIDÆ.*

## COMMON SNIPE.

*SCOLOPAX GALLINAGO.*

PLATE LXXXVI. FIG. II.

THE Snipe breeds in most parts of this country, becoming more common as we proceed towards the north. In Orkney Mr. Salmon “found them in abundance in every island where there was the least moisture.” In Shetland, they are much less numerous. They are generally to be met with in low marshy grounds, and we should not expect to find them elsewhere; it is, however, very difficult in describing the usual breeding-place of any species of bird, to say that it shall be met with in, and limited to, any particular species of soil. Upon Foula, the most westerly of the Shetland Islands, I was very much surprised at finding several nests of the common Snipe amongst the heather which covered the dry steep side of a mountain, and all in situations several hundred feet above the marshy plain. The Snipe lays its eggs amongst rushes, grass, or heather, making—and this only at times—a slight nest for their reception, by gathering together a few bits of heath and dry grass. The eggs of one bird are, I believe, invariably four in number; Mr. Low, however, in his “Fauna Orcadensis,” mentions particularly his having “several times found six eggs” in the same nest. This is only to be accounted for by supposing that two birds have laid together—a circumstance not very uncommon with several other species of birds, and one which may

probably account for our finding occasionally so many eggs in a nest of the blue titmouse. The size of the egg of this species is also a strong argument against its laying more than four,—more, indeed, than it could possibly cover. The egg is a remarkable production for a bird so small, being as large as that of the pigeon and of the rook, and considerably larger than those of the magpie and partridge—birds three or four times its own size and weight. Some eggs of the Snipe have the ground-colour of a clear green, some of an olive brown, and much darker than the plate ; a few of a light blue, like a variety which I have described, in speaking of those of the dunlin. Some are covered all over with small spots, like eggs of the redshank ; others blotched with deep brown and neutral tint.

*GRALLATORES.**SCOLOPACIDÆ.*

## JACK-SNIPE.

JUDCOCK.

SCOLOPAX GALLINULA.

PLATE LXXXVI. FIG. III.

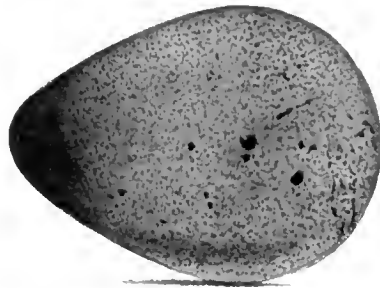
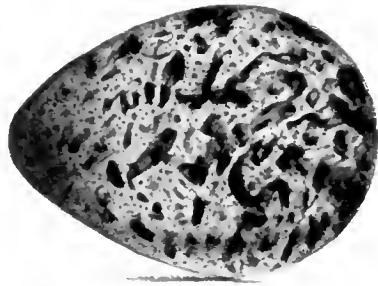
THERE are several reported instances of the Jack-Snipe having been shot in this country during the summer season. Mr. Selby was assured, during his visit to Sutherlandshire, that it breeds annually in that county, although he was not so fortunate as to find it. Mr. Low says that he has seen it in Orkney in the summer; I have seen it at Prestwick Carr, near Newcastle, after the common snipe had begun to lay its eggs, and have very little doubt that some of them remain to breed on the extensive moors and morasses of Scotland and Ireland. Such places are frequented only by the cutters of peat, and are very rarely trodden either by the ornithologist or by any one interested in his favourite subject, neither is it the time of year for the pursuits of the sportsman. The Jack-Snipe is at all times difficult to raise, and during the time that it is sitting upon its eggs, would allow you to walk over it without being flushed; and, unless carefully sought for with the assistance of a dog, would remain undetected. Temminck says, that they breed plentifully near St. Petersburg, and the late Mr. Hoy found its eggs at Falconswaerd in North Brabant; but I have to regret that his death deprived me of that information which he was always ready to communicate.

The accompanying figure is from one of the eggs brought home by him, and now in the collection of the Messrs. Tuke. If my memory does not deceive me, it is a good deal like a drawing shown me by Mr. Yarrell, which was made from an egg of this species in the Museum at Paris.





LXXXVII



GRALLATORES.

SCOLOPACIDÆ.

## BROAD-BILLED SANDPIPER.

TRINGA PLATYRHYNCHA.

PLATE LXXXVII.

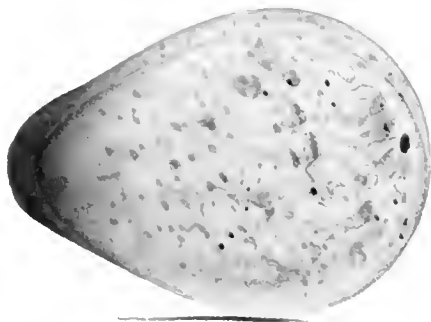
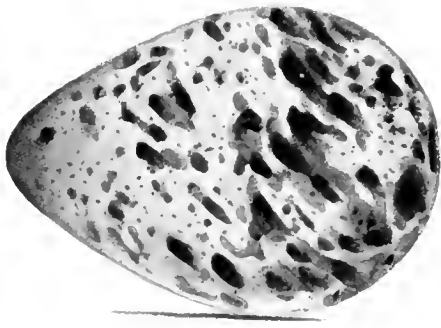
THIS bird, as well as its eggs, is quite a recent acquisition to our British list ; and, through the kindness of Mr. Yarrell, I am indebted for the opportunity of figuring the very interesting varieties of the eggs now given. To him they were presented by Mr. Dann, together with the following information given in the “ British Birds : ” — “ This Sandpiper is by no means uncommon, during the breeding-season, in Lulea and Tornea Lapmark, frequenting grassy morasses and swamps in small colonies, generally in the same places as those frequented by the wood sandpiper. It breeds also at Fogstuen on the Dovre Field mountains about three thousand feet above the level of the sea in Norway, where it arrives at the latter end of May. On its first appearance, it is wild and shy, and similar in its habits to the other species of the genus, feeding on the grassy borders of the small pools and lakes in the morasses ; on being disturbed its soars to a great height in the air, rising and falling suddenly like the snipe, uttering the notes, too-who, which are rapidly repeated. As the weather becomes warm, its habits totally change, skulking and creeping through the dead grass, and allowing itself to be followed within a few yards ; and when flushed, dropping again a short distance off. It seems to lay its eggs later than others of this tribe, generally. I found the eggs not sat upon on the twenty-fourth of June, and the last

week in July the young were unable to fly,—a period when all the other Sandpipers are on the move south. Its nest, like that of the snipe, was on a hummocky tuft of grass. I procured one nest with four eggs in it.”

The first figure of the plate is very much like eggs of the dunlin. Fig. II. is one of the most singular varieties of an egg which I have ever seen, and, except in shape, bears no resemblance whatever to the eggs of any of the Sandpipers with which we are acquainted, and yet the two eggs drawn were taken from the same nest.



LXXVIII



GRALLATORES.

SCOLOPACIDÆ.

## DUNLIN.

## TRINGA VARIABILIS

PLATE LXXXVIII. FIG. I. AND II.

THE DUNLIN breeds upon most of the heaths and marshy moors of the north of England, of Scotland, and the Scottish Isles; we met with nests in the Shetland Islands, but Mr. Salmon seems to have found them much more numerous in the Orkneys. In an account of his visit to those islands, which appeared some years ago in the "Magazine of Natural History," he says "This little bird we found in abundance, in almost every island, associating with the snipe. In some eggs we found the ground-colour of a light blue, inclining to a dirty white. The birds appeared to sit very close, and suffered us to approach very near to their nests, before they attempted to fly; in two instances I took them off the eggs."

The eggs of the Dunlin are usually placed very snugly either amongst heath, or under a tuft of long dry grass, and are then difficult to find; I have, however, seen them placed like those of the peewit, and with no more protection from the weather, upon the bare grass or moss which here and there grows in such beautiful green patches amongst the dark heather, and gives such charming variety to the scene, appearing more intensely green from the contrast. The Dunlin can scarcely be said to make a nest, for the most part merely rounding into form the grass or

moss amongst which it is about to lay its eggs: sometimes pieces of heath and a little dry grass are added, but this is not often. I once found the nest of this species upon one of the unfrequented moors of Shetland, and not then well knowing the eggs, I left them till I could return with my gun to secure one of the birds. I did return a few hours afterwards, but the eggs were gone; and though I have no evidence to prove it, I have myself no doubt that the birds had removed them to a place of safety. It was at least much more probable than that human means had done so in a district scarcely ever trodden.

In beauty of colouring and elegance of form, the eggs of the Dunlin are unrivalled. The ground-colour is sometimes of a clear light green, richly spotted with light brown; sometimes, as in the variety found by Mr. Salmon in Orkney, a specimen of which he was so good as to send me, the ground-colour is of a bluish white: the variety figured in the plate, from the collection of the Messrs. Tuke, is one of the most beautiful eggs I have ever seen.



*GRALLATORES.**SCOLOPACIDÆ.*

## PURPLE SANDPIPER.

TRINGA MARITIMA.

PLATE LXXXVIII. FIG. III.

MR. YARRELL mentions that a nest and eggs of this species, said to have been found in Scotland, were amongst the rarities in the museum of the late Mr. Bullock ; but who became the possessor of them at the sale of that museum, I have not been able to ascertain. In some remarks published by Mr. Selby on the birds frequenting the Fern Islands, he mentions having there met with the Purple Sandpiper, together with its young ones, which were scarcely able to fly.

I have seen small flocks of this Sandpiper during the breeding-season in Shetland, as well as whilst on a bird-nesting excursion amongst the Norwegian Islands ; and have often wondered why so many individuals of several species of the sea-birds are idlers during this busy season.

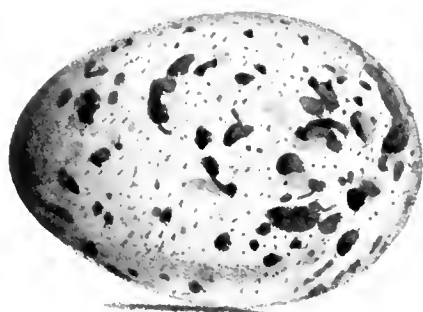
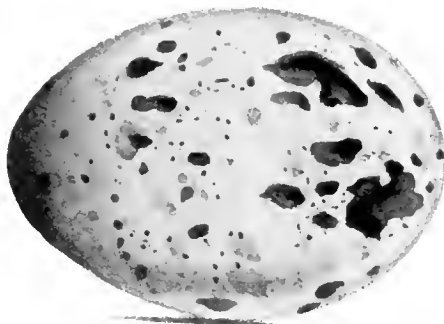
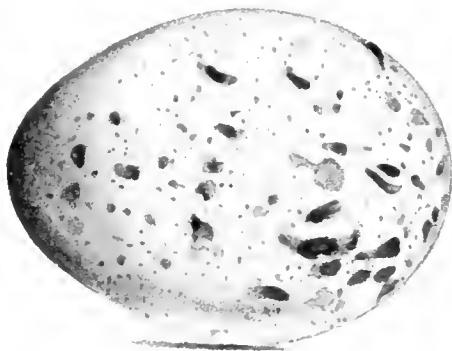
M. Thienemann says that he has had several eggs of this species from Iceland, where it breeds at a distance from the sea, upon those mountains on which are pools of standing water, laying its four eggs upon the ground, in the middle of a clump of dry grass, at the end of June or beginning of July.

To the kindness of Mr. Wilmot I am indebted for the pleasure of figuring this rare egg, two specimens of which

are now in his collection; they were formerly in the possession of Mr. Leadbeater, and were brought home by some of the parties engaged in one of the northern expeditions. Dr. Richardson says, that this species breeds abundantly on Melville Peninsula, and the shores of Hudson's Bay. One of Mr. Wilmot's eggs is much darker than the plate, both in ground-colour and in the markings which are crowded over the whole surface of the egg. The figure for the supplement to the Oology was the only one which I have ever copied, except from nature; and this was unfortunately made from a drawing, incorrect in its dimensions. Some eggs of the dunlin in the collection of Mr. Charles Adamson of Newcastle, are very much like those of the Purple Sandpiper.



1877



*GRALLATORES.**RALLIDÆ.*

## LANDRAIL—CORNCRAKE.

CREX PRATENSIS.

PLATE LXXXIX. FIG. I.

THE CORNCRAKE, though common in most parts of this country, is seldom seen by the common observer; skulking amongst the long grass, it very rarely takes to flight, till forced to it by the dog of the sportsman. It makes but a slight nest of dry grass, and lays its eggs, which are from seven to ten in number, amongst the long grass of our meadows, where they are frequently laid bare by the mower. Corncrakes are not uncommon in Shetland, where we saw them two or three times seated upon the stone walls, and looking as if very much out of their element. The eggs of this species seldom vary, except in the size and frequency of the spots: some have the ground-colour of a warm red tint, with deep red-brown and purple blotches; others, white, slightly tinted with blue, and fancifully streaked and spotted all over.

*GRALLATORES.**RALLIDÆ.*

## SPOTTED CRAKE.

SPOTTED GALLINULE. WATER-CRAKE.

CREX PORZANA.

PLATE LXXXIX. FIGS. II. AND III.

MR. J. HANCOCK, whose collection of birds' eggs is the best in this country, has a beautiful series of the eggs of this species, obtained by him during a bird-nesting excursion through the fenny districts of the counties of Cambridge and Huntingdon, — some collected on the borders of Whittlesea Mere, but chiefly in Yaxley Fen; to him I am indebted for the following information: — The eggs of the Spotted Crake, as well as those of the water-rail, which are met with in exactly similar situations, are in ordinary seasons very difficult to obtain, the nest being placed in a thick bed of reeds, which covers a large extent of country, growing to a height of six or seven feet, and therefore not easily penetrated. It happened that the year of which I am speaking had been unusually wet, and that the fen country had been covered with water, so that both these species, which had had their nests swamped, and their eggs and young ones destroyed during the usual breeding-season in the beginning of May, were a second time engaged in incubation, at the time of Mr. Hancock's visit in July, which was also the season during which the fenmen were mowing the reeds, and uncovering the nests of these species in the same way

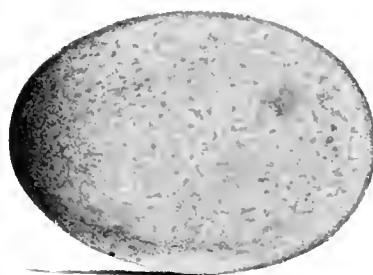
in which those of the corncrake are exposed by cutting down the long grass; several of the nests of the Spotted Crake (which are, however, less numerous than those of the water-rail) were thus readily obtained. They were placed on the marshy ground upon a bed of broken reeds, and were formed of the long ribbon-like grass of the reeds, and lined with a finer soft grass, which distinguishes them from those of the allied species. They contained from seven to ten eggs each, varying as the figures of the plate.







571



*GRALLATORES.*

*RALLIDÆ.*

BAILLON'S CRAKE.

CREX BAILLONII.

PLATE XC. FIG. I.

THIS species, which is a rare visitant, has not been known to breed in this country; it is not uncommon on various parts of the Continent, and according to Mr. Selby breeds annually in the marshes in the neighbourhood of Boulogne. Mr. Hoy took the eggs, from one of which the accompanying figure is copied, in 1835, near the river Meuse, in the north-eastern part of Belgium, but was unable to meet with them in the same locality the following year. The nest, he told me, is extremely difficult to find; it is placed, like that of the water-hen, upon tufts of reeds on the banks of rivers, or by the margin of ponds, and marshy districts: it is of sedge and water-growing plants, and contains from eight to ten eggs, which are strangely different, in every respect, from those of the nearly allied species. All the specimens which I have seen—and I have met with them in several of the German museums—are constant to the same regular oval form and to the colouring of the plate.

*GRALLATORES.**RALLIDÆ.*

## WATER-RAIL.

## RALLUS AQUATICUS.

PLATE XC. FIG. II.

THE WATER-RAIL is so local, being almost confined to some of our marshy districts, and is in these its favourite haunts so difficult to find, hiding itself amongst the thick herbage, that very little has been known till lately with regard to its eggs and nidification. Montague describes the eggs as of a spotless white; and Mr. Yarrell says, "I have found the eggs of the Water-rail very difficult to obtain, and never possessed but two,—one from Norfolk, and one from Cambridgeshire, and never saw more than three or four others."

Mr. John Hancock, of Newcastle, obtained several nests, and more than fifty eggs of this species, during an excursion which he made for that purpose through the fen districts. One of these nests, now in his collection, is like that of the water-hen, constructed entirely of coarse flags. The eggs in each nest were from seven to ten in number.

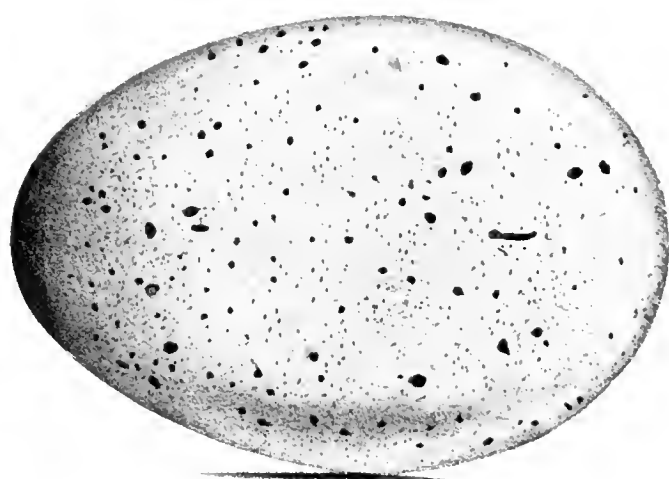
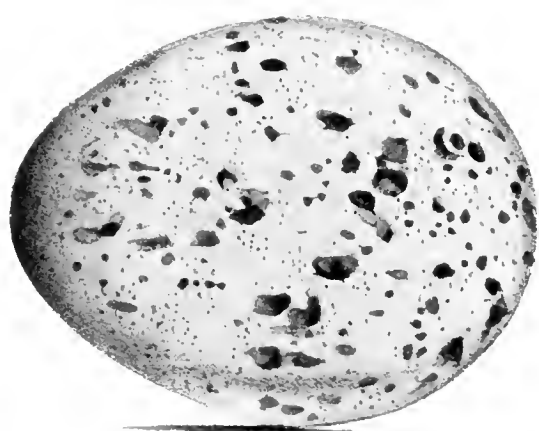
Mr. Wolley, to whom I am indebted for a large series of the eggs, tells me that they are so abundant in some parts of Cambridgeshire that the dealers sell them for one-third less than those of the corncrake; that one man near Cambridge had no less than fifty; and that he has seen many on those strings of birds' eggs which are hung up in the houses as a trophy of the bird-nesting exploits of the boys of the country. Mr. Salmon, from whom I have also received the egg of this

species, informs me that two nests in his possession resemble those of the water-hen, and were placed in similar situations, —one upon rushes floating on the water, the other upon a clump upon its margin. The eggs of this species are very much like those of the corncrake, and differ from them only in being nearly always less, with markings of a smaller size; they differ from each other in the size and number of the spots and are sometimes nearly spotless.





102





*GRALLATORES.**RALLIDÆ.*

## WATER-HEN—MOOR-HEN.

GALLINULA CHLOROPUS.

PLATE XCI. FIG. I.

I KNOW of no bird, when in a state of nature, the eggs of which differ so much in size as those of the Water-hen; whilst some specimens do not exceed one inch and six lines in length, others will measure five lines more, and will hold above twice the quantity of the smallest eggs: they are subject to very little variation in colour; the figure of the plate is of a medium size, and more closely spotted than is common.

The Water-hen builds its nest upon the sides of lakes and ponds, and frequently to its cost close upon the margin of a running stream, or upon an island, or sand-bank surrounded by its waters. Montague says that great numbers of them are annually destroyed in consequence of their being placed in such a position. Mr. Selby gives a most interesting account of a pair of Water-hens which raised their nest a story higher to avoid the rising of some water near which it was placed, carrying their eggs away till the elevation was completed, and again replacing them. Rusticus, also, a most agreeable writer in the Magazine of Natural History, gives an amusing account of his discovery of a nest of this species in a fir-tree twenty feet above the ground. He says, “The situation was a very odd one for a Moorhen’s nest, but there was a reason for it: the rising of the water in the pond fre-

quently flooded the banks of the island, and, as I have before witnessed, had destroyed several broods by immersion.” Mr. J. H. Tuke informs me that he has in several instances seen the nest of the Water-hen placed upon the boughs of a tree above the water, and that he saw one at Castle Howard upon the branches of a willow overhanging the lake there, and four or five feet above the water. I once came very suddenly upon a Water-hen, which dived on my approach ; and whilst I was leaning over a hedge close upon the margin of the brook, wondering that it did not again make its appearance from below, I found that it had approached the surface of the water, and, protruding its bill alone to breathe, remained entirely submerged ; it was then very near me, and as long as I remained perfectly still, and that was for some minutes, it did the same ; but the moment I moved and broke the spell, the fascination which seemed to paralyse its movements—for it watched me intently the whole time—it made another rapid somerset, and rose again some distance down the stream. The Water-hen makes a large nest of reeds, rushes, and other water-plants, and lays from five to ten eggs.

*GRALLATORES.**LOBIPEDIDÆ.*

## COOT.

FULICA ATRA.

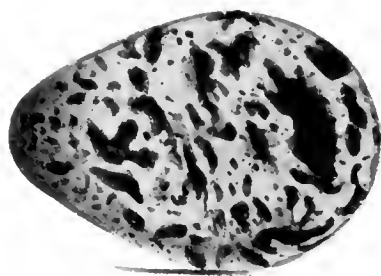
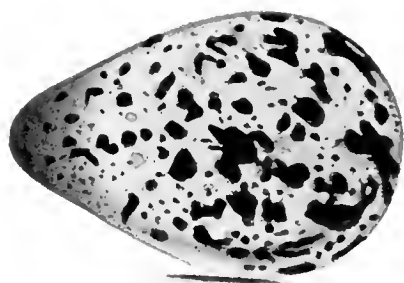
PLATE XCI. FIG. II.

THE COOT breeds in most parts of England, upon the margins of lakes, ponds, and rivers, usually towards the latter end of May or beginning of June ; though at this time I have seen the young ones in the water, which leave the nest soon after they are hatched. Through the kindness of the Rev. R. H. Brandling, of Gosforth, on whose property they breed in abundance, I have had an opportunity of examining many of their nests. They are large, and at first sight apparently clumsy ; but on examination are found to be amazingly strong, and compactly put together. They are sometimes built on a tuft of rushes, but more commonly amongst reeds ; some are supported by those that lie prostrate on the water, whilst others have their foundations at its bottom, and are raised till they become from six to twelve inches above its surface, sometimes in a depth of one and a half or two feet of water. So firm are some of them that, whilst up to the knees in water, they afforded me a seat sufficiently strong to support my weight ; they are composed of flags and broken reeds, finer towards the inside, and contain from seven to ten eggs, which vary very slightly except in size. That the nest may rise two or three inches with the rising of the water from a flood, is quite probable, from the elasticity of the reeds to which it is attached. Bewick relates the following curious anecdote. “ A Bald-

Coot built her nest in Sir William Middleton's Lake at Belsay, Northumberland, among the rushes, which were afterwards loosened by the wind, and of course the nest was driven about and floated upon the surface of the water in every direction, notwithstanding which the female continued to sit as usual, and brought out her young upon her moveable habitation."



VCL



*GRALLATORES.**LOBIPEDIDÆ.*

## GREY PHALAROPE.

PHALAROPUS LOBATUS.

PLATE XCH. FIG. I.

It being my wish from the commencement of this work, as I have stated when speaking of the pratincole, that it should form a companion to Mr. Yarrell's birds, the same arrangement has been adopted, otherwise I should have drawn the eggs of this species next after those of the sandpipers. It would be difficult to place the Phalaropes in a position more unnatural than that which they occupy at present, next to the waddling-coot, which they resemble in nothing except their lobed feet ; whilst in almost all their habits and mode of life, and in the number, contour, and colouring of their eggs, they closely approximate to the sandpipers.

Of the habits of the Grey Phalarope very little is yet known. Mr. Proctor has had the eggs from a naturalist in Iceland, who says that he has met with the nest occasionally ; that it is very slight and placed upon elevated ground in the midst of marsh. Mr. Yarrell has the egg of this bird from Melville Island.

GRALLATORES.

LOBIPEDIDÆ.

## RED-NECKED PHALAROPE.

PHALAROPUS HYPERBOREUS.

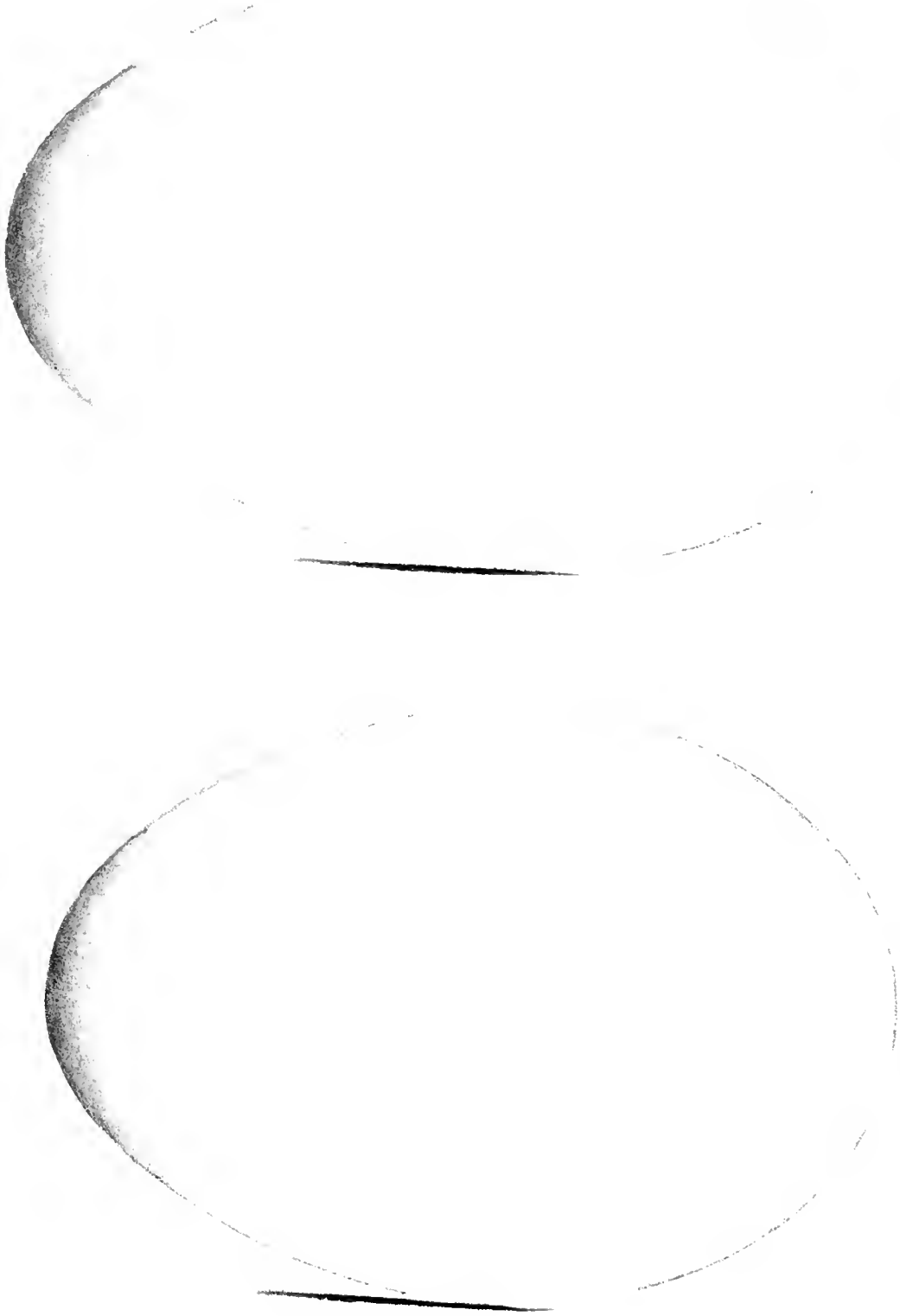
PLATE XCH. FIG. II.

THIS very elegant species is, I believe, in this country confined during the breeding-season to the islands of Orkney, near the fresh-water lakes of which it makes its nest. Mr. Salmon, who explored them in search of eggs, has given an account of his visit to those islands in the *Magazine of Natural History*, from which I extract the following particulars:—"This beautiful little bird appeared to be very tame; although we shot two pairs, those that were swimming about did not take the least notice of the report of the gun: and they seemed to be much attached to each other, for when one of them flew to a short distance, the other directly followed; and while I held a female that was wounded in my hand, its mate came and fluttered before my face. We were much gratified in watching the motions of these elegant little creatures as they kept swimming about, and were for ever dipping their bills in the water, and so intent were they upon their occupation that they did not take the least notice of us, although within a few yards of them. After some little difficulty we were fortunate in finding their nests, which were placed in small tufts of grass growing close to the edge of the loch; they were formed of dry grass, and were about the size of a titlark's, but much deeper. They had but just commenced laying, June 13th, as we found only from one to two eggs in each nest." Mr. G. C. Atkinson found the Red-necked Phalarope breeding abundantly on the margins of the lakes in Iceland. The eggs are four in number, and vary but slightly.





NCM



*NATATORES.**ANATIDÆ.*

## GREY LAG GOOSE, AND BEAN GOOSE.

ANSER FERUS AND SEGETUM.

PLATE XCIII. FIG. I.

THE eggs of these two species of geese are so perfectly alike, that I have drawn but one figure to represent them both. I have since learned from Mr. Hancock that the eggs which we brought from Norway—one of which I figured in the Oology as the egg of the Bean Goose—are those of the other species, the Grey Lag Goose. We had the pleasure of finding a nest of this bird upon the centre of one of the numerous small islands which cover the Norwegian Sea :—the island was within a short distance of the arctic circle, and was like the very many which we visited, low, flat, and varied with patches of bare rock, and tufts of coarse grass, with pools of fresh water and not exceeding a few yards in diameter. The nest was formed of a considerable quantity of coarse dry grass, thickly lined with feathers, and contained three eggs, quite fresh ; one of which, from the pure whiteness of its shell, had evidently been laid that morning. This was in the beginning of June, and two months after the usual time of breeding ; but is readily accounted for by the unremitting persecution which every species of bird experiences, even in these remote districts. Parties scour the islands periodically, and plunder them of every egg ; frequently destroying even those which have been too much set upon for their use, in order to secure to themselves fresh ones only on their next

visit. One of these parties had, unluckily, just preceded us, thus rendering hopeless our chance of procuring eggs, of which we were in search.

We were told by those annually in the habit of taking the eggs of this species, that they usually amount to four or five. We repeatedly saw the old birds passing from one island to another, but always wary and unapproachable.

Mr. Selby, who met with the Bean Goose in the north of Scotland, thus writes:—"We were agreeably surprised to find that the Bean Goose annually breeds upon several of the Sutherland lakes. The first intimation we received of this interesting fact was at Lairg, where we were informed that a few pairs bred upon some islands about twelve miles up Loch Shin; we accordingly took boat the following morning, and upon arriving at the place, discovered a single pair, attended by four or five young goslings. Upon Loch Naver we also found several pairs attended by their young, seemingly about a fortnight or three weeks old; one of which, after a severe chase, we procured. Upon the island of Loch Laighal, from thirty to forty pairs, we were informed, annually had their nests. We saw several old birds and the nests that had been used, which are concealed in heath upwards of three feet in height, that covers the islands. The eggs were all hatched, and most of the young had betaken themselves to the neighbouring moors, where they continue till able to fly, secreting themselves when disturbed in the highest heather. The eggs are from five to seven in number.

Mr. Wilmot has the eggs of this species, sent to him from the county of Sutherland, the dimensions of which exactly correspond with the eggs of the Grey Lag Goose.

*NATATORES.**ANATIDÆ.*

## PINK-FOOTED GOOSE.

ANSER BRACHYRHYNCHUS.

PLATE XXIII. FIG. II.

THIS species, though very closely resembling the bean goose, from which it is dissimilar chiefly in its smaller size, the comparative shortness of its beak, and the colour of its legs and feet, differs from it, as Mr. Yarrell has shown, still more in habit, and when confined with the other species—the grey lag, the bean and white-fronted geese, which are all upon the most familiar footing with each other—keeping itself aloof from all of them.

Mr. Macgillivray says, that “the Pink-footed or short-billed Goose breeds in great numbers in the small islands of the Sound of Harris. This bird was seen in flocks so late as the beginning of May: was observed in pairs among the islands of the Sound about the middle of the month, and had the young strong upon the wing about the end of July.”

Mr. Proctor has the eggs of this species from Iceland.









*NATATORES.**ANATIDÆ.*

## WHITE-FRONTED GOOSE.

ANSER ALBIFRONS.

PLATE XCIV. FIG. I.

MR. PROCTOR has had the eggs of the White-fronted Goose from Iceland, where it breeds occasionally.

Mr. Yarrell says that this species breeds in small numbers south of Juckasiervi, in Tornea Lapland, but not further west than Killingsuvanda. The egg from which the figure is taken is in the collection of Mr. Yarrell, and was laid by a bird in the gardens of the Zoological Society, where they have succeeded in rearing their young ones.

*NATATORES.**ANATIDÆ.*

## BARNACLE GOOSE.

ANSER LEUCOPSIS.

PLATE XCIV. FIG. II.

WE have scarcely any satisfactory information with regard to the summer habits of the different species of geese. Most of them resort to the uninhabited wilds of the countries far north during the breeding-season, and it is only when in confinement that we have an opportunity of obtaining their eggs. The Barnacle Geese in the collection of the Ornithological Society in the St. James's Park, have produced eggs; and from one of these, in the collection of Mr. Wilmot, the accompanying drawing is copied.

*NATATORES.**ANATIDÆ*

## BRENT GOOSE.

ANSER BRENTA.

PLATE XCIV. FIG. III.

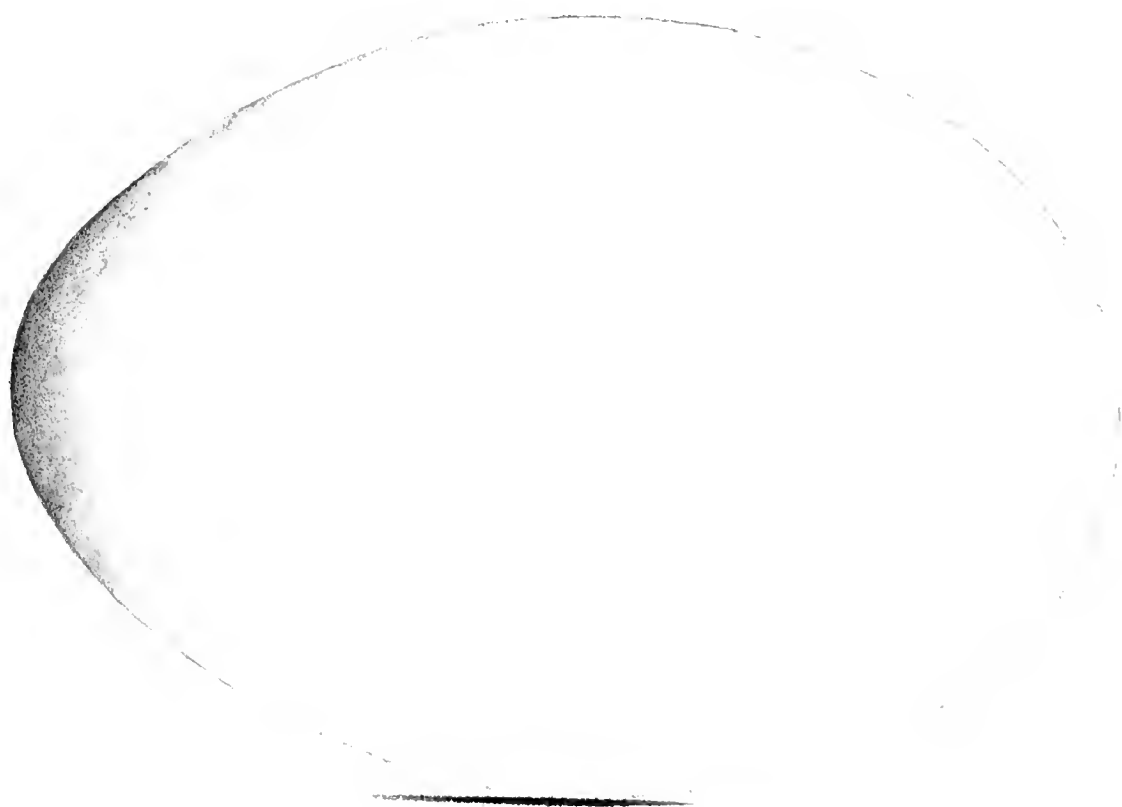
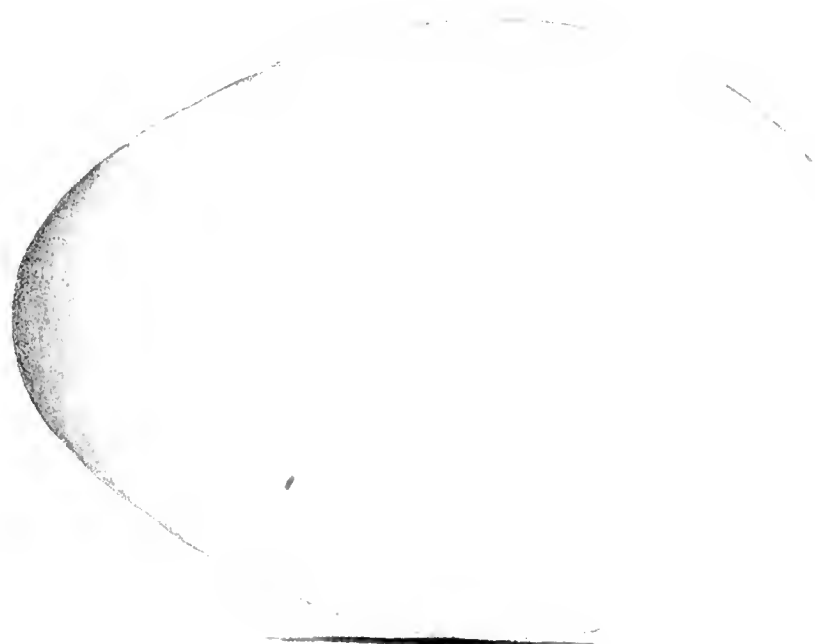
SOME eggs of the Brent Goose were brought to this country by the officers of one of the arctic expeditions, one of which is now in the collection of Mr. Wilmot.

The eggs of this species differ from those of the other geese in being slightly tinted with a faint brownish colouring, whilst they are all, when quite fresh, either pure white, or slightly tinted with cream-colour.





ΔCv



*NATATORES.**ANATIDÆ.*

## EGYPTIAN GOOSE.

## ANSER EGYPTIACUS.

PLATE XCV. FIG. I.

I HAVE figured the eggs of this and the following species, not from any conviction on my own part that they have any right to be considered British Birds, but because they are figured as such by Mr. Yarrell.

The Egyptian Goose has bred in the gardens of the Regent's Park, as well as in those of the Bristol Zoological Society. The annexed figure is from an egg thus laid in confinement.

*NATATORES.**ANATIDÆ.*

## CANADA GOOSE.

ANSER CANADENSIS.

PLATE XCV. FIG. II.

MR. AUDUBON thus writes of this species :—" It is found to breed sparingly at the present day, by many of the lakes, lagoons, and large streams of our western district, on the Missouri, the Mississippi, the lower parts of the Ohio, on lake Erie, the lakes further north, and in several large pools situated in the interior of the eastern parts of the states of Massachusetts and Maine. As you advance farther towards the east and north, you find it breeding more abundantly ; while on my way to Labrador, I found it on the Magdaleine Islands early in June sitting on its eggs. In the Island of Anticosti there is a considerable stream, near the borders of which great numbers are said to be annually reared ; and in Labrador these birds breed in every suitable marshy plain.

" The Canada Goose begins to form its nest in March, making choice of some retired place not far from the water ; generally among the rankest grass, and not unfrequently under a bush ; it is carefully formed of dry plants of various kinds, and is of a large size, flat, and raised to the height of several inches. Only once did I find a nest elevated above the ground ; it was placed on the stump of a large tree standing in the centre of a small pond, about twenty feet high, and contained five eggs. The greatest number of eggs which I



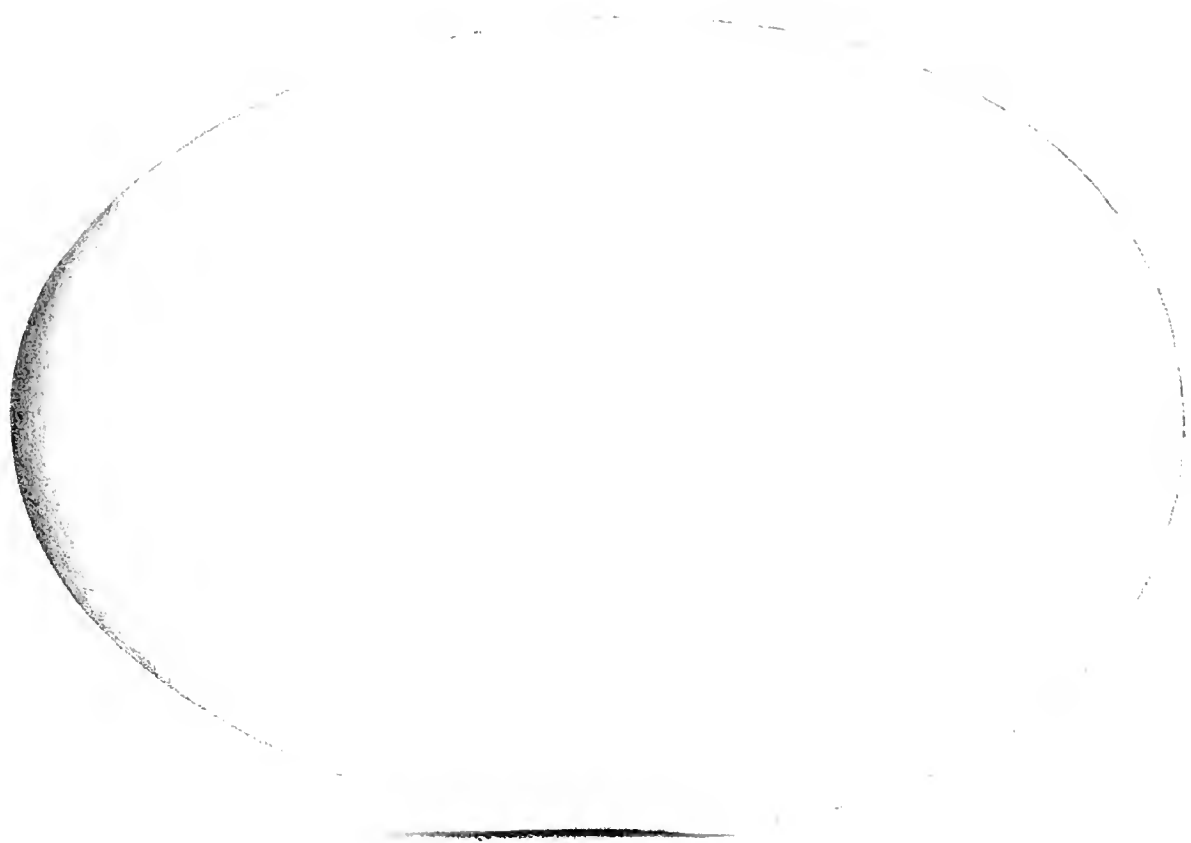
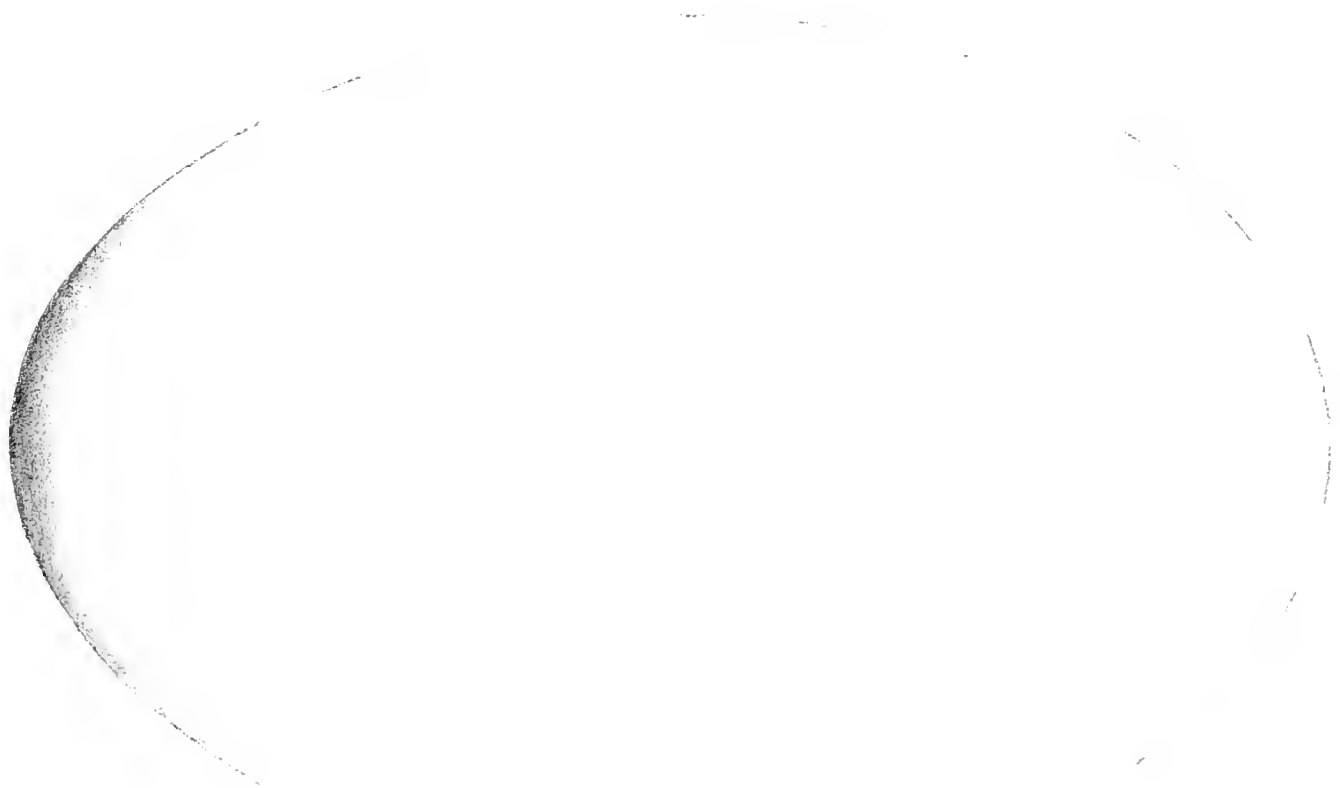
have found in a nest of this species was nine, which I think is more by three than these birds usually lay in a wild state."

Dr. Richardson says, "The Canada Goose generally builds its nest on the ground ; but some pairs occasionally breed on the banks of the Saskatchewan in trees, depositing its eggs in the deserted nests of ravens or fishing-eagles."





XCVI



*NATATORES.**ANATIDÆ.*

## SWAN.

## CYGNUS FERUS.

PLATE XCVI. FIG. I.

DURING the time in which the Rev. Mr. Low wrote his Fauna of the Orkneys, the Swan was known to breed on some of the outer islands of that group. It has, however, long since ceased to remain in this country during the breeding-season, and is now a visiter in the winter only.

Mr. G. C. Atkinson, of Newcastle, had the good fortune to meet with a nest and eggs of this species during his visit to Iceland. It was placed on the centre of a small island not more than fifteen or twenty yards in diameter, and just rising above the fresh-water lake by which it was surrounded. This was on the south-west of Iceland, where the Swans are seldom seen, although very abundant to the north of that country. The nest was made of water-plants, and raised about six inches above the sward on which it was placed; it was about eighteen inches in diameter, lined with materials similar to those used in its outward structure, and contained three eggs in the last stage of incubation. Mr. Proctor tells me that this species lines its nest with down, with which the eggs are also covered.

*NATATORES.**ANATIDÆ.*

## BEWICK'S SWAN.

## CYGNUS BEWICKII.

PLATE XCVI. FIG. II.

EVERY ornithologist must rejoice in the opportunity which the discovery of this fine species afforded of paying a tribute to one whose memory must be dear to each of them, but to those amongst whom the discovery originated, and by whom his inimitable works are not held in greater estimation than the recollection of his amiable disposition and kindly feelings, it must be peculiarly gratifying.

Although to Mr. R. R. Wingate is due the credit of having first made known the *C. Bewickii* as a distinct species, I cannot omit to state that his attention was first directed to the subject by Mr. John Hancock.

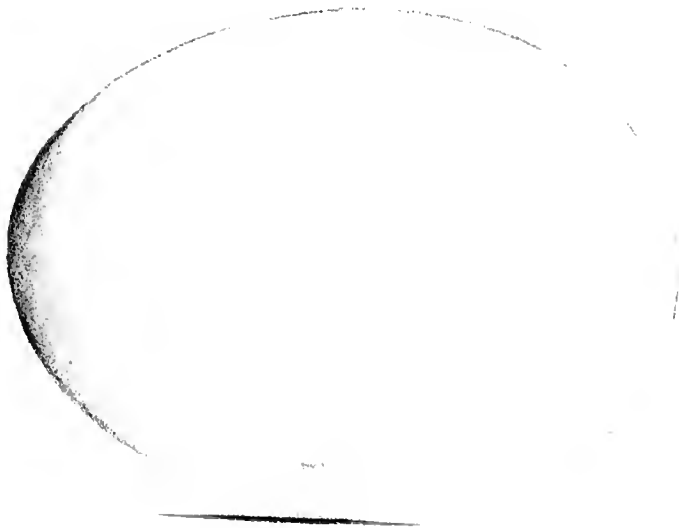
Little is known with regard to the nidification of this species, further than that it is said by M. Temminck to breed in Iceland.

Captain Lyon describes its nest as built of moss-peat, nearly six feet long, four feet and three-quarters wide, and two feet high externally, the cavity one foot and a half in diameter.

The time occupied by the Swan in sitting is six weeks, —nearly double that of the majority of birds; the young, too, are slow in arriving at their full growth, it being three months before they are fully fledged.



XCVII.





*NATATORES.**ANATIDÆ.*

## SHIELDRAKE.

TADORNA VULPANSER.

PLATE XCVII. FIG. I.

UNLIKE any other species of this tribe of birds, the Shieldrake deposits its eggs in holes under ground. It selects for that purpose the deserted burrow of a rabbit, and makes its nest at various distances from the mouth of the hole, from three to six feet and sometimes even at a greater depth. The eggs are from ten to twelve in number, large, and of a very smooth shell, sometimes, as in the plate, very round in form, and nearly pure white; sometimes oval, and slightly tinged with colour common to the eggs of the wild-duck; the nest is composed of a small portion of dried grass lined with down. A nest in Mr Hancock's collection, which was carefully dug out of a rabbit-burrow, is entirely formed of a thick bed of down, and yet retains its cup-like form. The down of which the nest of this species is constructed, is beautifully clean, and unmixed with dry grass or other material made use of by those ducks to give weight and tenacity to the lining of their nests, which, being exposed, might otherwise be blown away. The Shieldrake breeds upon Holy Island or Lindisfarne, and the low sandy links of the mainland which are nearly opposite the island, and are one large rabbit-warren.

This beautiful duck forms one of the greatest ornaments on those lakes and pieces of water which occur in pleasure-

grounds ; the eggs are in consequence eagerly sought after and hatched, and the young ones reared for sale ; the hole in which they are deposited is ascertained by attaching a hook to the end of a long stick, and thrusting it successively into each till feathers are drawn out, and by this same means the eggs are afterwards extracted.

*NATA TORES.**ANATIDÆ.*

## SHOVELER.

*ANAS CLYPEATA.*

PLATE XCVII. FIG. II.

MR. JOHN HANCOCK has the nest and eggs of the Shoveler which were found upon Prestwick Carr, a piece of waste ground of considerable extent near Newcastle covered with heath and furze, boggy, and intersected with drains, and having a piece of water near its centre. From thence, towards the end of May, a nest was brought to him containing nine eggs; it was composed of grass mixed with the down of the bird, and was placed in the centre of a furze-bush, by which it was sheltered. Two or three weeks after this, a second nest was found at a short distance from the spot from which the other had been taken: it was constructed of the same materials, was similarly situated, and contained ten eggs; these were quite fresh, and led us to suppose that they belonged to the same bird which had been previously robbed.

I have likewise received the egg of the Shoveler from Norfolk from Mr. Salmon, taken on the tenth of May from a nest which was placed amongst a quantity of green rushes, but without the profusion of feathers so generally observed in the nest of this tribe of birds, there being barely sufficient quantity of dry grass to keep the eggs from the bare sand;

it was much exposed, and contained eight eggs, which were within a few days of hatching.

The Messrs. Paget state that the Shoveler is occasionally not at all uncommon in Norfolk, and that several nests, containing altogether fifty-six eggs, were found during one summer in Winterton Marshes.

*NATATORES.**ANATIDÆ.*

## GADWALL.

## ANAS STREPERA.

PLATE XCVII. FIG. III.

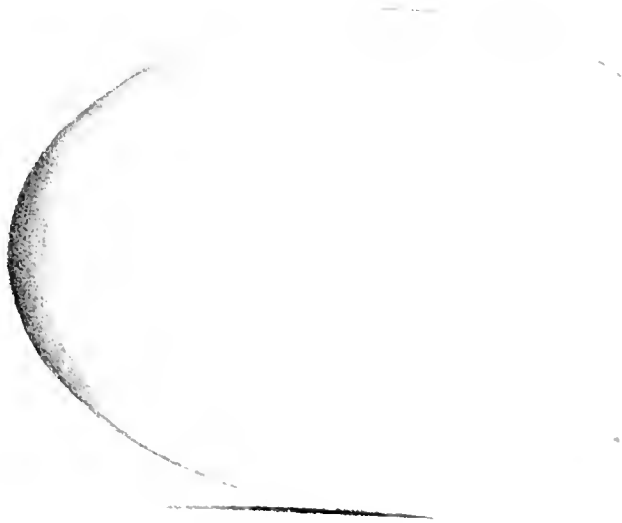
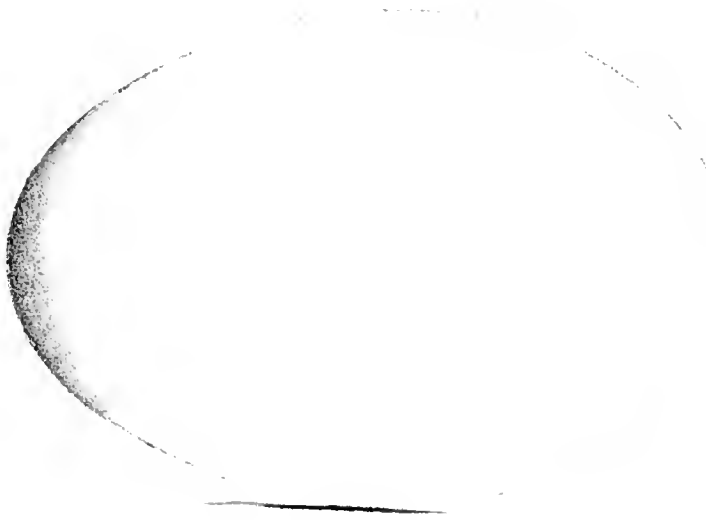
THE nest of the Gadwall, which is very similar to that of the common wild duck, is built upon the ground in retired and marshy districts, amongst the rank aquatic herbage, and in the sedge and rushes which border inland pools and meres. The eggs are from ten to twelve in number. The egg from which the drawing is copied was brought from Holland by Mr. Hoy, to whom I am indebted for specimens, together with the information just given.

Mr. Proctor found a single nest of the Gadwall in Iceland, which was placed near the edge of fresh water amongst some reeds; it was composed of dry grass, and the eggs, which were five in number, were covered with down. Mr. Yarrell says that the ducks of this species, which breed at the Zoological Gardens, lay seven or eight eggs.





ΛCVM





*NATATORES.**ANATIDÆ.*

## PINTAIL DUCK.

*ANAS ACUTA.*

PLATE XCVIII. FIG. I.

MR. PROCTOR, who has found the nests of this species in Iceland during his visits to that country, tells me that it is not a common bird there, and that it breeds, like most of the other ducks, amongst the thick herbage near the margin, or within a short distance of fresh water; that the nest is composed of grass and reeds, and lined with a small quantity of down, and contains from six to eight eggs.

Mr. Yarrell says that this species is common in Lapland, and at the head of the Gulf of Bothnia, during the summer months; that it breeds late, and has five or six young ones.

NATATORES.

ANATIDÆ.

## WILD DUCK.

ANAS BOSCHAS.

PLATE XCVIII. FIG. II.

THOUGH the larger proportion of the wild ducks that visit us in the winter months go farther north to breed, a number of them remain in this country, throughout which they are pretty widely spread,—several of them resorting wherever large tracts of undisturbed water or marshy ground, with here and there a pond or pool of water, are to be met with,—a single pair sometimes frequenting the banks of rivers and smaller streams of water, when the margins afford cover of reeds or rushes, amongst which to make their nests.

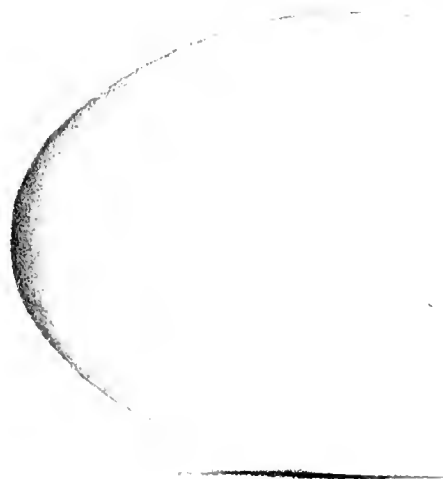
We should scarcely expect to find the nest of the Wild Duck in a tree, and yet several instances have occurred in which it has chosen for itself a site thus elevated, and apparently uncongenial to its usual habits. Mr. Tuke has met with a nest of this species in the grounds of Castle Howard, in a large tree twenty feet above the ground, and fifty yards from the edge of the water. Mr. Tunstall speaks of one at Etchingham, in Sussex, which was built in an oak-tree twenty-five feet above the ground, and contained nine eggs; and Mr. Selby says that a Wild Duck laid its eggs in the nest of a crow, at least thirty feet from the ground.

The nest of this species, when it has received the last finish to its interior, and contains the full quantity of down, is remarkable for the regularity and roundness of its form and

the thick interior walls of soft white down ; its outside is formed of dried grass ; its diameter inside is a little more than six inches, and the lining of down nearly three inches thick. The Wild Duck usually lays from ten to twelve eggs, although as many as fifteen are said to have been found in one nest. Mr. J. Hancock, who has found several of their nests, and has two in his collection preserved with great care, tells me that they mostly cease to lay after the eleventh egg ; each of these nests contains eleven eggs, and there seems scarcely room for more.







*NATATORES.**ANATIDÆ.*

## GARGANEY.

## ANAS QUERQUEDULA.

PLATE XCIX. FIG. I.

ALTHOUGH the Garganey has been shot in this country during the breeding-season, its nest and eggs have not yet been found.

Mr. Hoy, who met with them on the Continent, sent me the following short notice: "The Garganey commences laying its eggs about the middle of April. The nest, which is composed of rushes and dried grass mixed with the down of the bird, is placed upon the ground in low boggy situations, among the coarse herbage and rushes in marshes, and on the borders of inland waters and rivers. The eggs are from eight to ten in number.

*NATATORES.**ANATIDÆ.*

## TEAL.

*ANAS CRECCA.*

PLATE XCIX. FIG. II.

THE Teal, which is one of the wild ducks which remain in this country to breed, but in smaller numbers than the mallard, is met with during the summer in places similar to those chosen by the commoner species, but usually more remote from the cultivated districts, resorting to those marshy moorland wastes which are yet untouched by the hand of cultivation and generally ornamented by small ponds or pools of water.

In such wild spots its nest is usually placed amongst the heath or long grass.

Prestwick Carr, a fine piece of wild moorland, intersected in all directions by drains and spongy swamps, a few miles from the town of Newcastle,—a place well-known by the naturalists of the neighbourhood for its riches in each of the branches of natural history, and probably frequented by a greater number of species of birds than any place of similar size in this country,—is one of the breeding-places of the Teal.

In Mr. Hancock's collection are two nests of this species, taken there by himself on the twenty-eighth of April, and each containing eleven eggs, the full number; they were placed amongst the long heather, of which, together with some dry grass, they are outwardly constructed, and lined two



inches thick with the softest down, kept together by having bits of heath and the stalks of grass interwoven with it. One of them is a very beautiful object, each separate piece of the down with which it is lined being outwardly of a dark brown with a pure white centre. Mr. W. M. Tuke has found the eggs of the Teal on Strensall Common, an extensive waste near York, and very much like the one I have just described ; they were placed, without any nest, under the shelter of a piece of furze.

Mr. Proctor met with many of the nests of this bird in Iceland, amongst the long herbage bordering the margins of the smaller ponds.

Temminck, though usually very accurate, is under a mistake in describing the eggs of this bird, when he says they are of a rosy white indistinctly spotted with brown.

NATATORES.

ANATIDÆ.

## WIGEON.

ANAS PENELOPE.

PLATE XCIX. FIG. III.

THE egg from which the drawing is taken, accompanied by the following information, was kindly sent me by Mr. Selby, who was the first to discover the Wigeon breeding in this country, during his ornithological visit to the north of Scotland. "The nest from which the eggs were taken was upon an island in Loch Laighal, upon which is a large colony of the lesser black-backed gull. It is covered with ferns and other long herbage; and the nest, well concealed in a thick bed of rushes, was composed of their decayed stems and other grasses, with a large quantity of the bird's down interwoven, the eggs being far advanced, and the young nearly ready for exclusion. The female we shot when she arose from the nest. Upon most of the lochs were several pairs."

On many of the Norwegian fresh-water lochs which we visited, especially those farthest in land, we observed several pairs of Wigeon, which were no doubt breeding there; but, owing to the hurried manner in which we were compelled to pass over so large an extent of country, expecting that every advance northwards would increase our success, we did not succeed in finding one of their nests.

Mr. Proctor, who found the nests of this species in Iceland, says that they were generally placed amongst low

bushes and long herbage, and were formed of grass and decayed reeds lined with down, and contained from six to eight eggs.

Mr. Dann says that this is the most abundant of the duck-tribe in Lapland, frequenting the grassy swamps, lakes, and rivers where it breeds, as well as in the Dofre Fiell, as high as the birch grows, and in many other parts of Norway and Sweden, but only in straggling pairs ; that it lays from five to eight eggs.

The grovelling ducks, of which the Wigeon is the last, usually lay a larger number of eggs than the diving ducks ; whilst those species, the eggs of which are already figured, lay from seven to twelve eggs, those which follow lay from five to seven, but larger in proportion to the size of the bird.







*NATATORES.**ANATIDÆ.*

## EIDER DUCK.

ST. CUTHBERT'S DUCK.

SOMATERIA MOLLISSIMA.

PLATE C. FIG. I.

THE males of this species, which spread themselves over the water in the neighbourhood in which the females are engaged in incubation, are a beautiful and highly interesting ornament of the northern seas. The Coquet, a small island at the mouth of the river of the same name, and near the hermitage of Walkworth, is their southern boundary during the breeding-season; there they lay their eggs and hatch their young ones, close under the walls and upon the low roof of an inhabited house, where they remain quietly seated upon their nests as undisturbed by your approach as the ducks and chickens of our domestic poultry, and will scarcely be driven from thence, so completely is their roving wild nature tamed and subdued at this season of the year by an uncontrollable and wonderful impulse. On the Fern Islands, twenty miles farther to the north, they are more numerous, and though you may meet with an odd one here and there over the several islands, the bulk of them seem partial to one in particular, where are the remains of an old lighthouse, around the walls of which we found about a dozen of their nests. Some had even established themselves within, under the roof of the deserted rooms, where they were well protected from the bleak winds and rough weather by which these exposed spots are visited. Holy Island or St. Cuth-

bert's Isle as it is sometimes called, upon which stands the beautiful old Abbey of Lindisfarne, where dwelt in days of yore the good St. Cuthbert, is one of this group. The Eider Duck seems to prefer the security of an island for its retreat during the breeding-season ; I have, however, found several of their nests upon the Links, the sandy banks which bound the sea-beach, when in search of the holes in which the Shieldrake breeds. The Eider Duck was one of the commonest birds which we saw upon the Norwegian seas ; we met with some of them upon many of the islands which we traversed, and might have collected a considerable quantity of the down. On one island, which was strictly preserved, they were in great numbers ; and hundreds of male birds beautiful in their pure black and white plumage, which were listlessly floating over a wide expanse of sea, added an indescribable interest to this otherwise desert scene. An old man who had the care of the island, and seemed to derive much pleasure from the charge, accompanied us all over his preserves, pointing out to us the ducks as they sat around us, apparently heedless of our near approach, and on quite familiar terms with our companion, who would even stroke them on the back, and was very jealous lest we should fire our guns and thus scare his pets. The Eider Duck breeds in such quantities in Iceland, that their down is made an article of commerce. Sir William Hooker, in his travels in that country, says, " Their nests were generally among the old and half-decayed sea-weed that the storms had cast high upon the beach, but sometimes only upon the bare rocks. It was difficult to make these birds leave their nests, and so little inclined were some of them to do it, that they even permitted us to handle them whilst they were sitting without their appearing to be at all alarmed. Almost every little hollow place between the rocks is occupied with the nests of these birds, which are so numerous. that we were obliged to walk with the greatest caution to



avoid trampling upon them. But besides this, the Stifsampt-man has a number of holes cut in the smooth and sloping side of a hill in two rows, and in every one of these there is a nest." The nest of this species is at first composed of dry grass only, the whole or greater part of the eggs being laid before the down is added, which is increased during the progress of incubation, and is rendered more firm and stable by having short bits of dry grass interwoven with it. The lining of one nest, which I brought home with me, though easily compressed within my hand, when warm and expanded, filled my hat, and was one ounce and five-eighths in weight: the old bird, which I shot from it, did not appear to be more than half-divested of its down. In Iceland, where they are robbed two or three times successively during the season, Von Troile states that the quantity given by each duck is half a pound—a large estimate when compared with the quantity contained in the nest that I have spoken of, which was taken at the time the eggs were hard sitten, and therefore contained the full quantity of down, or nearly so. The eggs of this species are five in number, but it is not an unusual thing to find ten in the same nest,—the produce of two birds, which sit very amicably together. When the bird is absent, the eggs are carefully covered over, no doubt for the double purpose of concealment and of warmth. The same precaution is, however, adopted when the nest contains only two or three eggs, and before the down has been added, or the birds have begun to sit, and there is consequently no warmth to loose, they are carefully covered over with grass and leaves, gathered for the purpose, and sometimes fresh and green.

*NATATORES.**ANATIDÆ.*

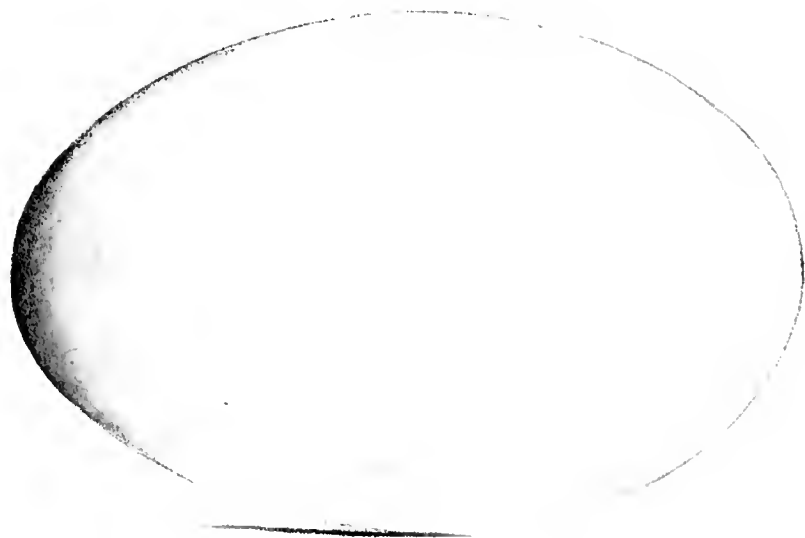
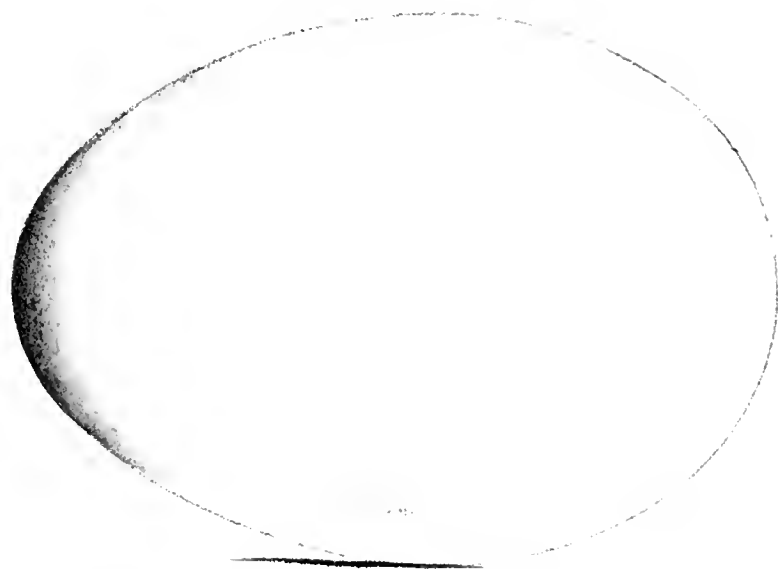
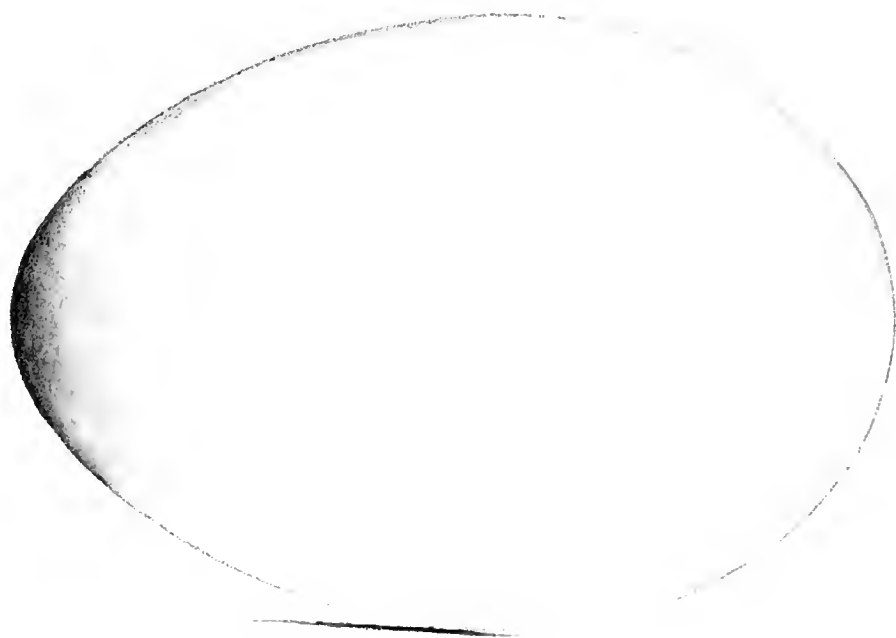
## KING DUCK.

SOMATERIA SPECTABILIS.

PLATE C. FIG. II.

THE KING DUCK has acquired a place in the list of our British Birds, by having two or three times appeared upon our coast. It is abundant in Greenland and Spitzbergen, and, as stated by Captain Sabine, is in some places as numerous as the eider duck, which it resembles as much in its habits as in appearance. Its nest is, like that of the eider duck, lined with the soft down of the female, and contains five eggs, exactly resembling those of the eider, except in size. The egg from which my drawing is made was brought from Greenland by the captain of one of the whaling-vessels, and is now in the collection of Mr. J. Hancock.





*NATATORES.**ANATIDÆ.*

## VELVET SCOTER.

## OIDEMIA FUSCA.

PLATE CI. FIG. I.

MR. AUDUBON, from whose work I extract the following particulars relative to this species, is the only ornithologist who has had an opportunity of observing its habits during the breeding-season, who has given any account of his observations.

“During the breeding-season, the Velvet Duck resembles the cider in its habits, only that it prefers fresh water, which is rarely the case with the other species. Those which breed at Labrador begin to form their nests from the first to the tenth of June, and on the twenty-eighth of July I caught some young ones several days old. The nests are placed within a few feet of the borders of small lakes, a mile or two distant from the sea, and usually under the low boughs of the bushes, of the twigs of which, with mosses and various plants matted together, they are formed; they are large and almost flat, several inches thick, with some feathers of the female, but no down under the eggs, which are usually six in number.”

Mr. Dann, a correspondent of Mr. Yarrell's, says that “this duck is common during the summer months in the interior of the whole of Scandinavia, north of lat. 60°. It frequents and breeds on the large lakes on the mountainous districts, especially those of which the shores are flat

and boggy, and covered with vegetation. In Lapland it is common everywhere. The eggs are much sought after by the Laps. These birds are also common in the Dofre Fiel, appearing at the latter end of May. They hatch very late, seldom before the middle of July. Their nests are placed on hummocks, amongst the willow-swamps or long grass near the water. They frequent the lakes as high as the birch grows."

To the kindness and liberality of Mr. Wilmot, I am indebted for the rare egg from which the accompanying figure is taken.

NATATORES.

ANATIDÆ.

## SCOTER.

## OIDEMIA NIGRA.

PLATE CI. FIG. II.

IN describing the habits of the geese and ducks during the time of incubation, I am glad to have recourse to the information of others, not having myself enjoyed the pleasure of following them to their places of resort in the far north. In the part of Norway which we visited, extending along the coast from Drontheim to within the arctic circle, although we saw many species of the duck-tribe, and this amongst the rest, they were almost always in small flocks, and apparently, like ourselves, roving from place to place. Mr. Proctor, to whom we are indebted for most of the eggs of the Scoter in our collections, tells me that they are thinly dispersed over Iceland, where he only succeeded in finding two of their nests, which were formed of grass and aquatic plants lined with down, and contained the one four and the other six eggs. M. Tienemann says that it builds its nest near the margin of lakes and rivers, often far in land, placing it amongst brush-wood on stony ground, and forming it of grass, stalks of angelica, and leaves of willow, thickly lined with down, in which it lays about ten eggs. Mr. Dann, speaking of Scandinavia, has supplied the following note to the British Birds of Mr. Yarrell: "This duck frequents the same places, and is very similar in its habits to the velvet duck, both being generally found in the same localities. After the female has laid, the males associate in large flocks, and slowly draw towards the coast, where they arrive in October. The eggs are generally from five to seven in number."

*NATATORES.**ANATIDÆ.*

## SURF SCOTER.

## OIDEMIA PERSPICILLATA.

PLATE CI. FIG. III.

MR. AUDUBON'S work has supplied me with the following :  
“ I found the waters of the Gulf of St. Lawrence alive with ducks of different species. The nearer we approached the coast, the more numerous did they become ; and of the many kinds that presented themselves to our anxious gaze, the Surf Duck was certainly not the least numerous. It is true that in the noble bays of our own coast, in the sound between New York and the Hook, on the broader waters of the Chesapeake, and beyond them to the mouths of the Mississippi, I had seen thousands of Surf Ducks ; but the numbers that passed the shores of Labrador bound for the far north, exceeded all my previous conceptions. For more than a week after we had anchored in the lovely harbour of Little Macatina, I had been anxiously searching for the nest of this species, but in vain. At length I found that a few pairs had remained in the neighbourhood ; and one morning, while in the company of Captain Emery searching for the nests of the red-breasted merganser, over a vast oozy and treacherous fresh-water marsh, I suddenly started a female Surf Duck from her treasure. We were then about five miles distant from our harbour, from which our party had come in two boats, and fully five and a half miles from the waters of the Gulf of St. Lawrence. The marsh was about three miles



in length. The nest was snugly placed amid the tall leaves of a bunch of grass, and raised fully four inches above its roots. It was entirely composed of withered and rotten weeds, the former being circularly arranged over the latter, producing a well-rounded cavity, six inches in diameter by two and a half in depth. The borders of this inner cup were lined with the down of the bird in the same manner as the eider duck's nest, and in it lay five eggs, the smallest number I have ever found in any duck's nest."





CI \*



NATATORES.

ANATIDÆ.

## FERRUGINOUS DUCK,

WHITE-EYED DUCK.

FULIGULA LEUCOPHTHALMOS.

PLATE CI.\*

Eggs, supposed to be those of the Ferruginous Duck, are in the collections of Dr. Pitman and Mr. Wilmot, and I have little doubt are correctly named. They are unlike those of any of the numerous species which I have figured, and exactly resemble in size that given in Dr. Thienemann's work; and are also like others sent me by Mr. Green, a dealer in birds and birds' eggs, whose address I have given on the cover of the last part of this work.

In 1844, Mr. Green had five eggs of this species, together with the birds alive, from Holland, which eggs resemble the plate in colour: last summer he received others, which were tinted with green, but this variation from cream colour to several shades of green is not uncommon in different individuals of the same species of this tribe of birds. Temminck says that this species breeds amongst the reeds on the borders of large rivers and marshy districts, and that it lays nine or ten eggs. The egg figured was kindly lent me by Dr. Pitman.









*NATATORES.**ANATIDÆ.*

## POCHARD.

## FULIGULA FERINA.

PLATE CIL. FIG. I.

I HAVE much pleasure in being able, through the kindness of the Messrs. Tuke, to add this species to those of the duck-tribe which remain in this country during the breeding-season.

The drawing which accompanies this notice is from an egg in their collection, taken from a nest near Scarborough, which was placed upon the marshy borders of a lake, the old bird being shot as it left the eggs.

I cannot do better than quote the information on this interesting subject sent me by Mr. James H. Tuke : “ Whilst at Scarborough about the middle of June last year, Mr. Bean informed me that several pairs of red-headed ducks, as the gamekeeper called them, had been seen upon a piece of water a few miles from Scarborough, and that he was going the next day to see if he could find their nests. I had the pleasure of accompanying him, and sure enough several pairs of Pochards flew up from their reedy habitation, as we passed our boat up amongst the tufts of grass and long reeds which at one end of the lake form a bog of many acres in extent, almost inaccessible, for between these tufts of treacherous grass the water is some feet deep : it was with the greatest difficulty we managed to jump from one of these tufts to another. Whilst beating about amongst this herbage, a female

Pochard flew up almost close to us, and in a short time the gamekeeper, who was with us, found a nest lined with feathers, and rather under the shade of a bush of *Myrica gale* which grows plentifully in this bog. I had the pleasure of seeing the nest, but unfortunately there were no eggs. After trying in vain to find another nest, we marked the spot and left. Mr. Bean returned in a few days, and found eggs in this and another nest very near it, from which the one I sent you was taken." I am sorry to say that Mr. Tuke has since told me that the York and Scarborough railway will destroy the privacy of this, the only known summer resort of this species.

The egg which was figured in the Oology was considerably less than that now figured; it was sent me by Mr. Hoy, who told me that a small number of these birds remain during the summer months, and breed upon the borders of the inland meres, so numerous in many parts of Holland, the nest being placed amongst the rushes or other coarse herbage abounding in those situations.

*NATATORES.**ANATIDÆ.*

## SCAUP DUCK.

## FULIGULA MARILA.

PLATE CII. FIG. II.

THIS species, like the preceding, has been once detected breeding in this country. Mr. Selby, in his notice of the birds of Sutherlandshire, says that “a single female was shot by Sir William Jardine in a small loch between Loch Hope and Eriboll. She was attended by a young one, which unfortunately escaped among the reeds.” We saw Scaup Ducks during the month of May, upon some of the numerous pools of water which are interspersed over the Shetland Islands, but were disappointed in our expectations that they would remain to breed. The eggs of this species were brought from Iceland by Mr. Proctor, who says that it is there a very common bird; that it will, in some instances, make its nest among the thick herbage, and in others, upon the bare stones by the edge of the fresh-water lochs; that it makes only a slight nest of a few stems of grass, but thickly lined with down, and lays from five to eight eggs.

Mr. Yarrell’s correspondent, Mr. Dann, says that the Scaup Duck “breeds on the swampy lakes towards the north of the Bothnian Gulf near Lulea, in considerable numbers. They are also tolerably numerous in the Dofre Fiell mountains, frequenting and breeding near swampy solitary lakes as high as the birchwood grows. At whatever season the Scaup Duck is shot, it is generally very fat and heavy. The eggs are five or six in number.”

*NATATORES.**ANATIDÆ.*

## TUFTED DUCK.

## FULIGULA CRISTATA.

PLATE CH. FIG. III.

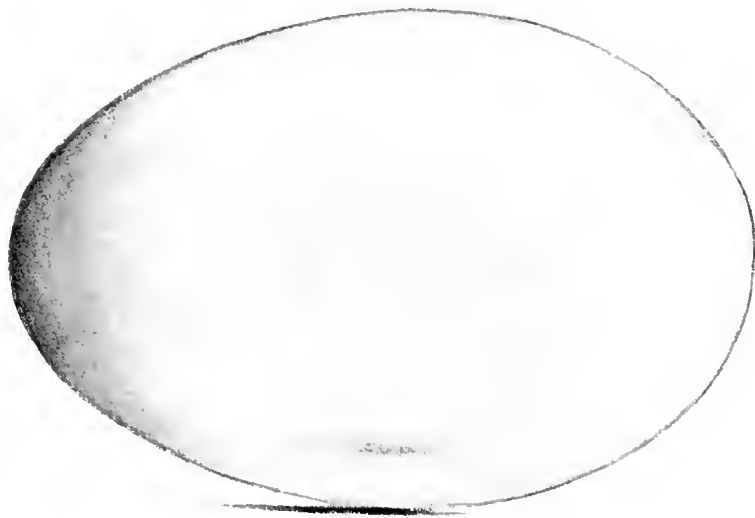
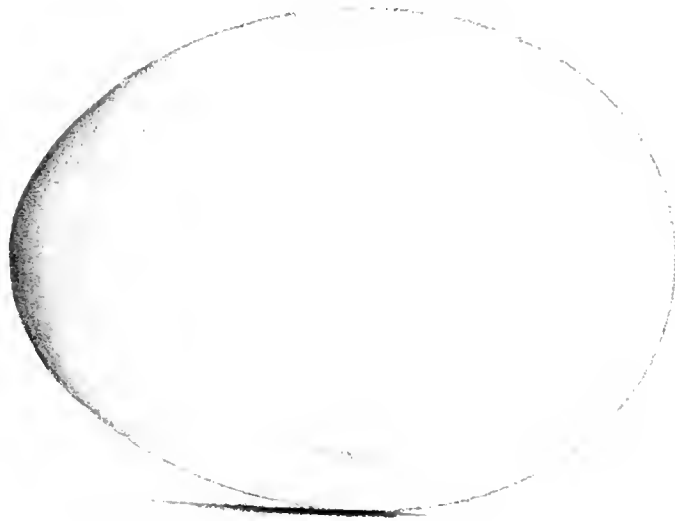
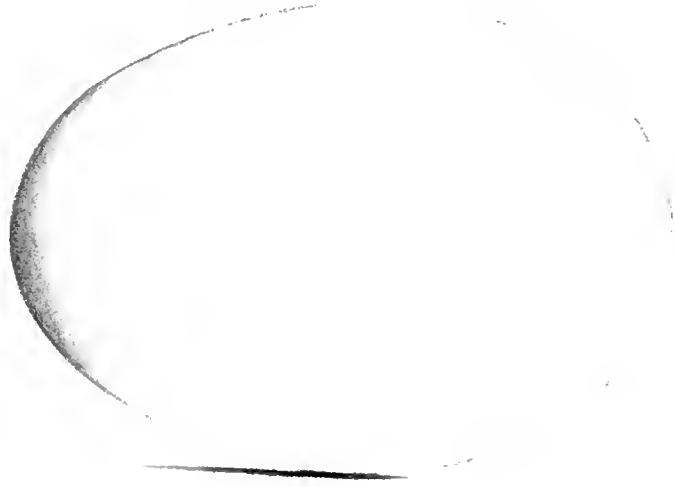
I HAD the following brief notice relative to this species, together with the egg from which the accompanying drawing was made, from Mr. Hoy, who met with it on the Continent.

“A very few pairs of the Tufted Duck are scattered during the breeding-season among the inland waters of Holland, and breed on their borders amongst the thick cover which generally skirts them. They lay from eight to ten eggs. The great body of these birds certainly leave for northern countries, a very few only remaining in temperate climates in some favourable localities.”

Mr. Dann says that this species breeds in the neighbourhood of Lulea on the Gulf of Bothnia.



Ch.



*NATATORES.**ANATIDÆ.*

## LONG-TAILED DUCK.

*FULIGULA GLACIALIS.*

PLATE CHII. FIG. I.

WE met with this species in Norway in considerable numbers, and although those which were shot and dissected had every appearance of being shortly about to breed, they were still always in flocks, roving from place to place and apparently yet unattached to any particular locality, sometimes sweeping past within a few yards of us with great rapidity, uttering their strikingly wild, musical, and most interesting cries. Mr. Dann also saw them during the whole summer and in various parts of Norway, but was unable to find their eggs.

Eggs of this species were brought from Iceland by Mr. G. C. Atkinson, who found a nest near the margin of a small lake ; it was lined with down, and contained six eggs.

Mr. Proctor, who was with Mr. Atkinson, and has since explored that country in search of birds, tells me that this species is there common ; that it makes its nest amongst low brushwood and aquatic plants by the edge of the fresh water ; that it is formed of a few stems of grass and reeds, well-lined with down, and usually contains from six to ten eggs, and in one instance twelve in number.

*NATATORES.**ANATIDÆ.*

## HARLEQUIN DUCK.

## FULIGULA HISTRIONICA.

PLATE CIII. FIG. II.

ORNITHOLOGISTS are indebted to Mr. G. C. Atkinson, of Newcastle, for the first knowledge of the nest of this species. He obtained them during a summer's ramble in Iceland; and, whilst visiting the celebrated Geysers, had the eggs brought to him, together with the bird, which had been shot in rising from them. He had himself, afterwards, the further satisfaction of finding a nest containing either seven or eight eggs, deposited in a bed of the bird's down upon the grass, bordering the margin of a shallow lake, and within a few yards of the nest of the long-tailed duck. The down in the nests of both these species, Mr. Atkinson remarks, is much more pure than that of the eider duck, and more free from those pieces of dried grass mixed with the down of the latter.

Mr. Proctor informs me that the Harlequin Duck is by no means common in Iceland, where it chiefly frequents cascades and rapidly running streams, building its nest, which is composed of dry leaves, grass, and reeds, lined with down, amongst low bushes and water-growing plants; the eggs being from six to eight in number.

Mr. Audubon, writing of this species, says, "On the thirty-first of May, I found them breeding on White Head Island, and other much smaller places of a similar nature,



in the same part of the Bay of Fundy. There they place their nests under the bushes, or amid the grass, at a distance of twenty or thirty yards from the water. Farther north, in Newfoundland and Labrador for example, they remove from the sea and betake themselves to small lakes a mile or so in the interior, on the margins of which they form their nests beneath the bushes, next to the water. The nest is composed of dry plants of various kinds, arranged in a circular manner to the height of two or three inches, and lined with finer grasses. The eggs are five or six, rarely more.

*NATATORES.**ANATIDÆ.*

## GOLDEN EYE.

FULIGULA VULGARIS.

PLATE CIII. FIG. III.

THE eggs of a duck were brought to us whilst in Norway by a boy, who said that he had taken them from a hole in a tree. This surprised us a good deal ; but far more so when, upon going to the place, we found the hole was merely that of a woodpecker, and so small, that I should have thought it quite impossible for a bird so large as a duck to enter. It was about twelve feet from the ground, and about a foot in diameter inside, the entrance so narrow as hardly to admit the hand, and lined with the soft down of the bird. This we examined very closely, being exceedingly anxious to ascertain the species, and hoping to find some feather by which we might identify it, but in vain. The boy had told us upon our first inquiries, that after having taken in succession five eggs from the nest, the bird had forsaken it ; we had cross-questioned him in every way, and were about to relinquish any further hope of ascertaining the species, when it turned out, through the still persevering queries of Mr. Hancock, that the absence of the poor bird was owing to the boy having taken it upon the nest and carried it home for dinner. To his home we therefore followed him, in hopes that some of the feathers might still be in existence, which to our great joy we found to be the case, together with the wings of the murdered bird ; and from them we readily ascertained

that our eggs were those of the Golden Eye, which is said by Linnæus to breed in trees, and is, I have no doubt, the bird spoken of by Acerbi in his travels through Sweden, which he says breeds abundantly on the river Tornea in boxes erected by the natives for the reception of its eggs, and which he calls the Goosander. In confirmation of my supposition is the following information supplied to Mr. Yarrell by his correspondent, Mr. Dann : “The Golden Eye is numerously spread over the whole of Lapland, as far as the wooded districts extend, both to the westward range of mountains which separate Norway from Sweden as well as the eastern parts. It breeds in small numbers on the coast of Norway, but not from Stavanger northward, and on the Dofre Fiell mountains. It prefers rivers to lakes, particularly the neighbourhood of falls and rapids. The Laps and settlers place boxes with an entrance-hole in the trees on the banks of the rivers and lakes, in which the Golden Eye lays its eggs. Although the birds are always robbed of their eggs, they gain nothing by experience, but seem to have such a predilection for holes in trees, that if such cavities are to be found, artificial or natural, they always appear to prefer them to any other locality.”

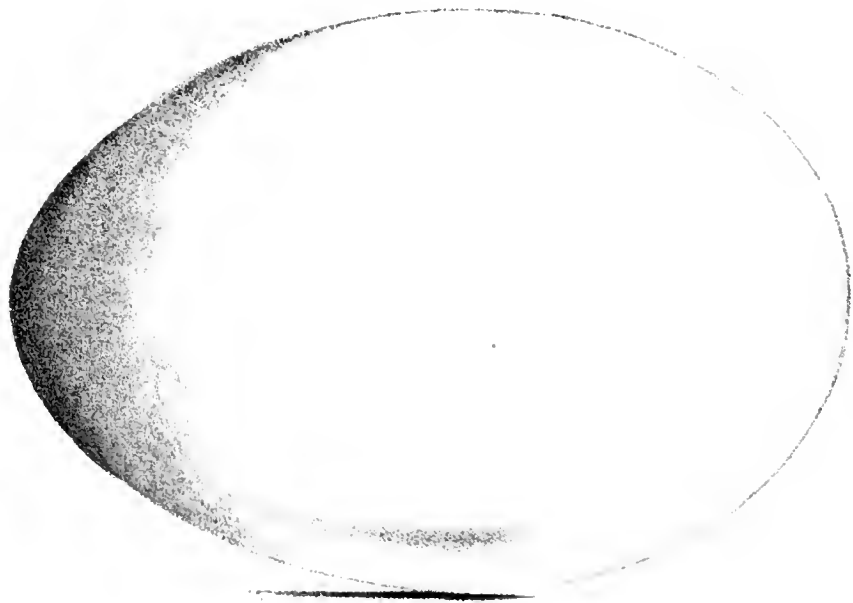
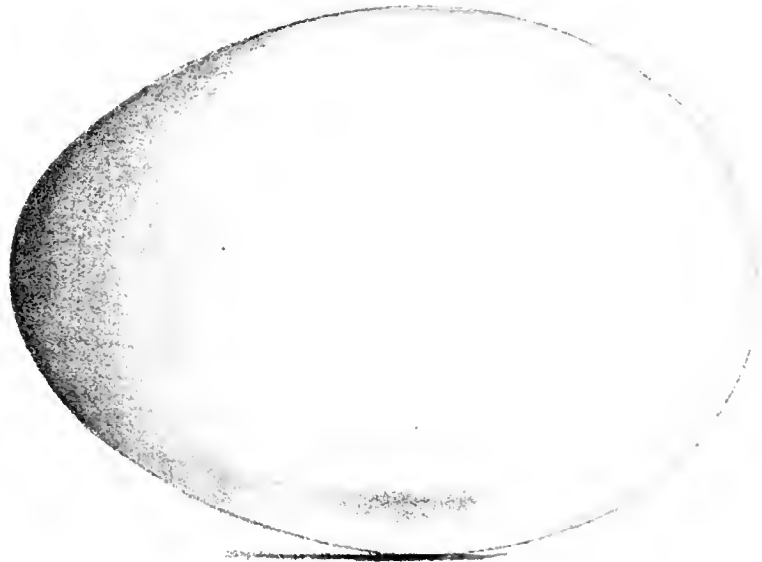
The eggs of the Golden Eye which we obtained, were several degrees of latitude nearer the pole than the boundary mentioned by Mr. Dann as the northern limit to the range of the species on the coast of Norway during the breeding-season.

The eggs of this species are of a much deeper and brighter colour than those of any of the duck-tribe which I have seen.





CIV



*NATATORES.**ANATIDÆ.*

## RED-BREASTED MERGANSER.

## MERGUS SERRATOR.

PLATE CIV. FIG. 1.

MR. SELBY informs me that he and Sir William Jardine found several nests of this species near the margin of Loch Awe in Scotland; it has also been met with breeding on the Hebrides, in Shetland, and in Ireland. It is one of the commonest of the duck-tribe in Norway; we saw several of them on almost every fiord, lake, and river, and few of the larger islands on the sea-coast were without them. They prefer the neighbourhood of wood, and are most frequent upon the lakes and rivers inland, on the woody borders and little islands of which they make their nests, placing them for the most part at the base of some young spruce-fir tree, under the branches of which they are dry and sheltered. One of the nests which we found was, nevertheless, upon an island at sea, at some distance from the main land, in a bleak and unsheltered situation. It was placed amongst the long grass in a hole scooped in the earth, and forming a most perfect circle. It was composed of dry grass, lined with down and feathers, and just large enough to contain the eggs, six in number: the bird, however, sometimes lays as many as nine. They are most commonly like the one figured, sometimes rather darker, and inclining to green. I have remarked that the smaller birds, which I have had constant opportunity of observing, usually lay their eggs early in the morning; I was therefore surprised to find that two of the Red-breasted Mergansers which we shot contained eggs, quite hard and ready for laying, as late as eleven o'clock in the forenoon.

*NATATORES.**ANATIDÆ.*

## GOOSANDER.

MERGUS MERGANSER.

PLATE CIV. FIG. II.

MR. MACGILLIVRAY says, that this species is not uncommon on the Western Isles of Scotland, and that it breeds there ; and Mr. Low states, that in his time the Goosander remained to breed on one of the Orkney Islands. The eggs of this species were first added to our collections by the perseverance of Mr. Proctor of Durham, who found them during his visit to Iceland, where he traversed alone some of the least inhabited districts, enduring much hardship and privation, cheered by the hope of adding to our ornithological knowledge. The nests of this species, which Mr. Proctor found, were upon small islands in the fresh-water lochs near the sea-coast. They were composed of very few materials—a small quantity of dry grass, lined with down and feathers, and contained from four to six eggs, which nearly resemble those of the red-breasted merganser, but are larger, and usually of a lighter colour.

Mr. Audubon thus writes of this species: “The islands on which the Goosander is wont to breed are mostly small, as if selected for the purpose of allowing the sitting bird to get soon to the water in case of danger. The nest is very large, at times raised seven or eight inches on the top of a bed of all the dead weeds which the bird can gather in the neighbourhood. Properly speaking, the real nest, however, is not



larger than that of the dusky duck, and is rather neatly formed exteriorly of fibrous roots, and lined round the edges with the down of the bird. The interior is about seven inches and a half in diameter, and four inches in depth. There are seldom more than seven or eight eggs."

We had hoped, during our visit to Norway, to have obtained the eggs of this species, especially when we frequently saw the birds, and sometimes in considerable flocks, around the shores of the beautiful inlets of the sea, and the numerous islands which we traversed. These flocks were, too, with one or two exceptions only, composed of male birds, the partners of which we expected to find sitting their eggs upon the neighbouring woody shores; we were, however, altogether unsuccessful in our search, although we closely explored many places similar to those in which we had found the eggs of the red-breasted merganser. From the most intelligent of the natives we could obtain no satisfactory information; they were unable to solve the mystery: they told us they had never found the nest or eggs, but were convinced that the females were engaged in incubation somewhere in the country; and assured us that the males would be joined by them and their broods towards the close of the breeding-season.







NATATORES.

COLYMBIDÆ.

## GREAT-CRESTED GREBE.

LOON.

PODICEPS CRISTATUS.

PLATE CV. FIG. I.

MR. SALMON, from whose correspondence I derived much pleasure and information during the publication of the Oology, kindly obtained for me at that time the following particulars relative to the habits of this species, from the Rev. Richard Lubbock, of Norwich.

“The nest is often placed in an exposed situation, the season of nidification early—the middle of April: so that the young reeds have hardly sprouted sufficiently to conceal the nest from any one who passes in a boat; yet the appearance of the whole is so like a decayed mass of water-plants swept together by the wind, as not to be easily distinguished by an unpractised eye. Great portion of the nest is under water; that which is above is conical in some degree, and on the top, in a slight cavity, are deposited the eggs, of a whitish colour by nature, but often so stained by the damps of the locality as to present quite a different appearance. These eggs vary in number. I have seen nests with only three, all nearly hatched; four is a common number, and sometimes there are five, but one at least is generally addled, so that three young Loons are generally seen following the old one. The eggs are, almost without an exception, found covered with some fragments of rushes, flung carelessly over them so as to conceal

them. The female, on being disturbed, leaves the nest by diving; no bird is seen, but a motion is discerned in the surrounding reeds like a pike making his way through them, but slower and more regular. I have removed the rushes flung over a nest in the morning, and found them replaced in the afternoon. The female seldom rises within gunshot of the nest, and if a boat be stationed to intercept her, will tack about and alter her course under water, without rising to breathe. These birds leave our broads in winter, and return with the first glimpse of sunshine in the spring, when they soon pair and remain on the open water two and two, until the lengthening days incline them to build. Many people suppose that the Grebe can barely fly at all; on their first arrival in the spring however, I have known them show nearly as much facility of flight as a wild fowl. I have seen them, when disturbed on one broad, rise and make their point for another pool two miles distant; but no sooner do they build a nest than all their habits change, and they are the most skulking, diving, hiding creatures possible: indeed when a pool of water is much overgrown with reeds, you can hardly ever catch sight of them, even if several pairs are breeding around you. In 1833 I knew of five Loons' nests upon a reedy pool, where I was in the habit of setting nets and trimmers, and arguing from probability, there were other nests of which I knew nothing, yet, until the young were hatched, I only twice caught sight of a Grebe.

*NATATORES.**COLYMBIDÆ.*

## RED-NECKED GREBE.

PODICEPS RUBRICOLLIS.

PLATE CV. FIG. II.

THE eggs of the Red-necked Grebe are described by Temminck as of a greenish white, clouded with deep brown,—his description referring only to such specimens as have become soiled and stained by the materials of which the nest is composed. When first laid, they are, like the eggs of all the species, of a pure chalk white, sometimes slightly tinted with blue. The Red-necked Grebe has not yet been detected in this country during the breeding-season. It makes its nest, like the rest of the species, amongst the reeds and rushes bordering the margins of fresh-water lakes and ponds, and lays four or five eggs. Mr. Dann says that this species “is common, during the breeding-season, on many of the shallow reedy lakes at the head of the Bothnian Gulf, particularly between Pitea and Lulea. They seem to be confined to the vicinity of the coast of the Baltic. I have never met with them anywhere in the interior of the country, except in Scona and in the northern provinces of Sweden, although the whole of northern Scandinavia abounds with lakes. The character of those lakes, where alone I have seen and procured specimens of the Red-necked Grebe so far north as latitude 66°, is precisely similar to that of the broads of Norfolk and the meres of Holland, where some of the Grebes are so numerous.”







(71)



*NATATORES.**COLYMBIDÆ.*

## SCLAVONIAN GREBE.

HORNED GREBE.

PODICEPS CORNUTUS.

PLATE CVI. FIG. I.

THE egg of the Slavonian Grebe, from which the accompanying drawing is made, was brought from Iceland by Mr. G. C. Atkinson in 1831. The nest from which it was taken was placed amongst some rushes above the surface of the water; it was formed, like those of the other species, of sedges, reeds, and other water-plants, and contained four fresh-laid eggs of a pure chalky white, slightly tinted with blue, and yet unstained by the materials of the nest.

Mr. Proctor, who was in Iceland with Mr. Atkinson, and has since visited that country, tells me that he found this species rather common; that the nest, which is large, and composed of a mass of reeds and other aquatic plants, floats on the surface of the loch, rising or falling with any change in the level of the water; and that the old birds, which carry their young about with them, will dive whilst they are carefully concealed beneath their wings,—a proof that these birds do not, like most of the divers, use their wings to assist them in their progress under water.

*NATATORES.**COLYMBIDÆ.*

## EARED GREBE.

PODICEPS AURITUS.

PLATE CVI. FIG. II.

As far as we are acquainted with the habits of the Eared Grebe, they resemble those of the species with which we are more familiar. It breeds, like them, on the margins of ponds, and lays four or five eggs.

There is a peculiarity of form in the eggs of the Grebes which immediately distinguishes them from those of all other birds; they are widest in the middle, and taper so regularly towards each end, that it is not easy to distinguish that which is in other eggs the broader end. The shell is thick, and the material which forms it seems to be supplied in profusion, and frequently rises in uneven globules upon its surface, such as are often seen upon diminutive fowls' eggs. They are rarely seen of their original purity. When first laid, they are of a spotless chalky white, sometimes slightly tinted with blue; but, by coming in contact with the wet materials of the nest, by which they are also covered on the departure of the bird, they soon assume a very different aspect, and become besmeared and thoroughly stained throughout with various shades of dirty green.

*NATATORES.**COLYMBIDÆ.*

## LITTLE GREBE.

DABCHICK.

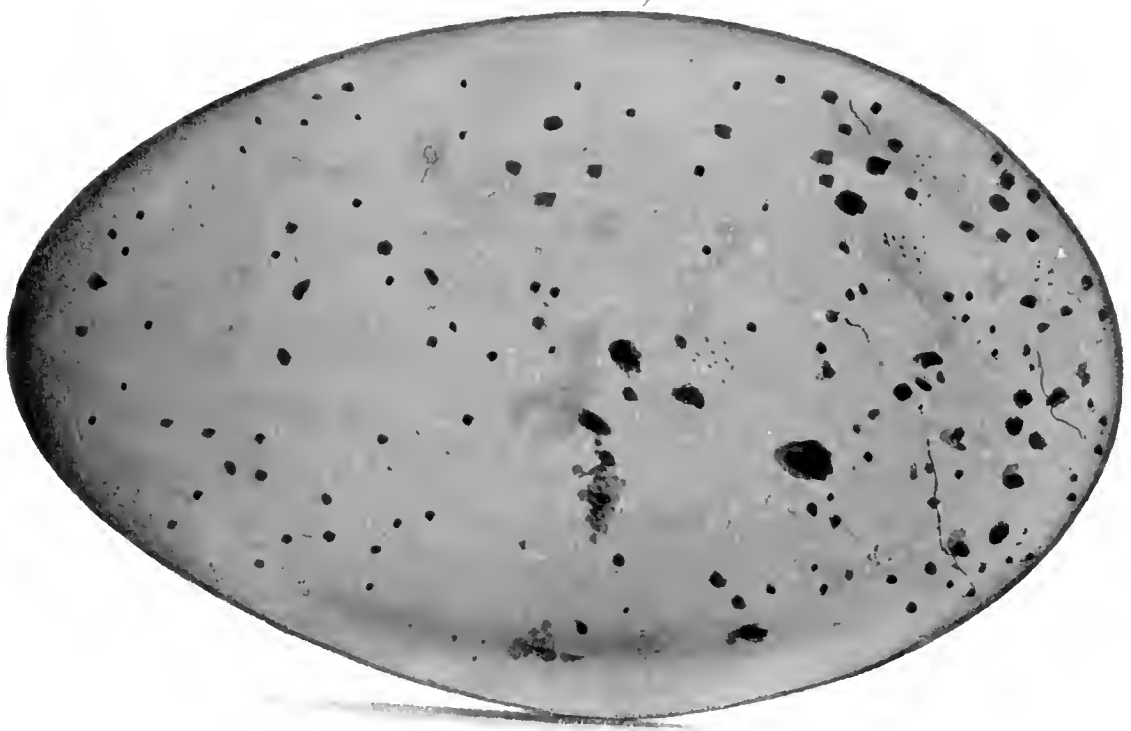
PODICEPS MINOR.

PLATE CVI. FIG. III.

THE nest of the Little Grebe, which is placed by the sides of lakes, ponds, and rivers, is at times constructed of a large quantity of reeds, flags, and rushes, and the drier species of water-plants; at other times it is chiefly composed of mosses, and soft green water-weeds mixed with an earthy substance, which imparts a colouring to the eggs very soon after they are laid. Mr. J. Hancock has a nest of this species, in shape an ill-formed cone, having a slight irregular depression at the top just large enough to contain the eggs, with sharp pieces of reed sticking up in the centre, apparently very inimical to the ease and comfort of the female. These nests when dry become so brittle, that they may be broken into small fragments. Mr. Salmon tells me, that he has seen several nests of this bird composed of small pieces of green rushes, each piece about three or four inches in length, and piled together to the height of about a foot above the surface of the water. None of the several nests examined by Mr. Salmon contained more than four eggs, although Montague says that they lay five or six. These are carefully covered on the departure of the bird by a portion of the materials of the nest, to conceal them from observation; and, notwithstanding this precaution, Montague tells us that they are frequently destroyed by the water-rat. The time of breeding of the Little Grebe is later than that of the great-crested, being about the middle of May.









*NATATORES.**COLYMBIDÆ.*

## GREAT NORTHERN DIVER.

COLYMBUS GLACIALIS.

PLATE CVII.

I KNOW of no instance of the Northern Diver having been detected breeding on the British Islands, although I have little doubt that some of them do remain to breed amongst the numerous Isles of Shetland, upon some of the many grassy uninhabited ones which are there called Holmes. Whilst on an excursion amongst them during the months of May and June, we frequently saw single birds, and in one instance came suddenly upon two together, one of which we shot. The fishermen who inhabit these islands, could give us no information about them; they see the birds there all the summer through, and being like their neighbours of Orkney, unable to say "how or where they breed," they have fully persuaded themselves that the old birds carry their eggs about with them, and hatch them under their wings. Mr. Low, in writing of the birds of Orkney, says, "The natural history of this species is somewhat paradoxical. Though they continue among these islands the whole year, I can find none to inform me how or where they breed."

A gentleman residing in Shetland, told us that he once saw a Northern Diver there, accompanied by a young bird.

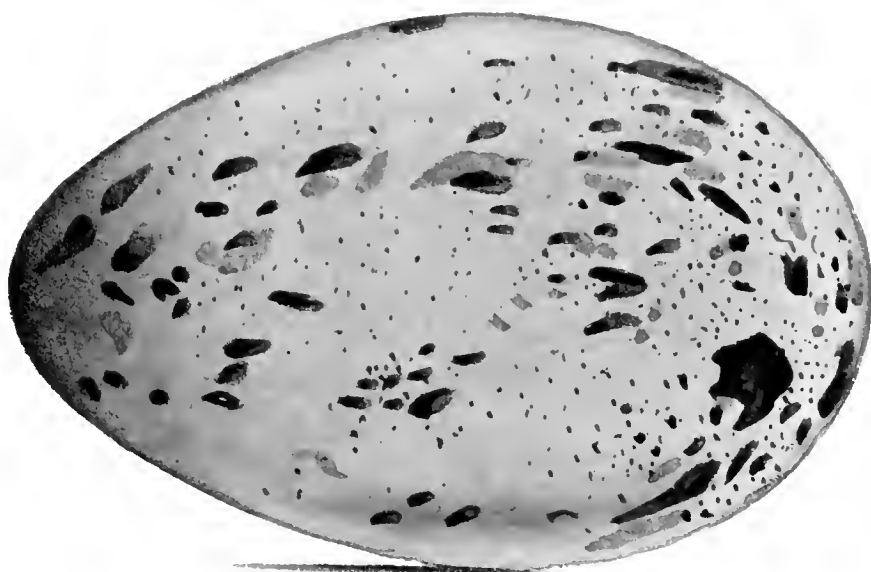
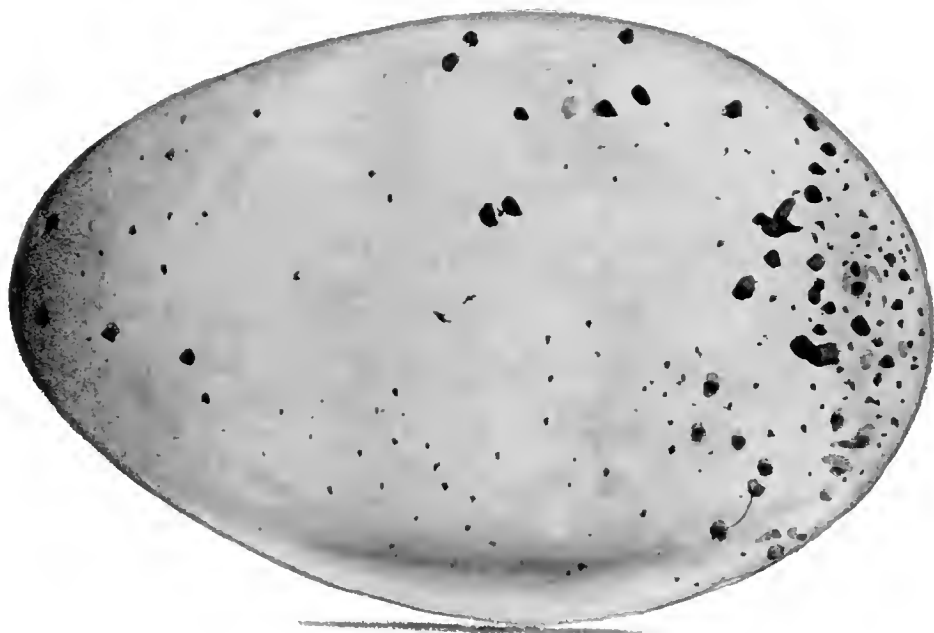
Mr. Proctor found the eggs of this species in Iceland, by the margin of a large fresh-water loch: he says, "I had often seen one of the birds come into the water near the same place

for two or three days together, and at last found one egg upon the bare ground a few yards from the water, under a rugged bank of broken ground. I left the egg in expectation of another being laid to it, but was disappointed; I was fortunate enough to find a second nest with one egg. The old bird was very shy, and always left the egg on my approach, even when I was a great distance off."

Mr. Audubon found the eggs of this species in Labrador, during his researches in that country.

We may conclude, I think, that the Northern Diver will in some instances lay two eggs like the nearly-allied species, although in the cases mentioned by Mr. Proctor there was only one.





NATATORES

COLYMBIDÆ.

## BLACK-THROATED DIVER.

COLYMBUS ARCTICUS.

PLATE CVIII. FIG. I.

FOR the pleasure of figuring this, a British specimen of the egg of the Black-throated Diver, I was indebted during the progress of the Oology to Mr. Selby, as well for his kindness in sending me a specimen of this rare egg from which to draw, as also for the particulars attending its first detection in this country.

It was in the summer of 1834, during an excursion to explore the zoological productions of the county of Sutherland, that Mr. Selby was rewarded by discovering this beautiful species breeding upon most of the inland lochs. The eggs, which are two in number, were first found upon a small islet at the bottom of Loch Shin; they were upon the bare ground, and at about ten or twelve feet from the water's edge. The bird was observed by Sir William Jardine, who formed one of the party, whilst in the act of incubation, and was seated upon its eggs in a horizontal position, and not upright like the cormorant, shag, and guillemot; and whilst still in this position, it also thrust itself forward when disturbed, and had thus worn with its breast a distinct track to the margin of the lake. We did not see this species in Shetland, nor is it met with in Orkney; and, much to our disappointment and surprise, it was only once that we got a sight of it during the whole of our journey along the Norwegian coast. But this

is accounted for by Mr. Yarrell's quotation from Mr. Dann, who says that it usually breeds inland, that "this beautiful diver is widely and numerously dispersed over the whole of Scandinavia during the summer months, but is most abundant in the northern parts. It breeds generally in the interior of the country on small islands in the most secluded and retired lakes. In Lapland and the Dofre Fiell mountains it is found as high as the birch-tree grows. It makes its first appearance in the spring, with the breaking up of the ice on the lakes, within twelve hours of open water being seen, this bird never fails to show itself. The eggs are generally two in number." Mr. Charles Adamson has the egg of this species from Sutherlandshire; it is in very few collections. In some of the London cabinets are eggs, supposed to be those of this bird, which would more properly be referred to the following species. The dimensions given by Mr. Yarrell, as the length and breadth of the eggs of this species, are exactly those of the ordinary sized eggs of the red-throated diver, some of which even exceed the measurements which he has given for the eggs of the Black-throated Diver.

*NATATORES.**COLYMBIDÆ.*

## RED-THROATED DIVER.

COLYMBUS SEPTENTRIONALIS.

PLATE CVIII. FIG. II.

THE RED-THROATED DIVER breeds on various parts of the mainland of Scotland, as well as on several of the islands of Orkney and Shetland; we met with it upon the western coast of Norway, upon all those beautiful pieces of water there known by the name of Fiords, which, preserving all the blue freshness of the ocean, are without its boisterous grandeur, and fringed with wood to their very margin,—some of the birch-trees almost dipping their pensile branches into their briny waters,—and possess even more than the beauties of our loveliest inland lakes. Few of the freshwater lakes were without it; and upon most of the larger islands out at sea, where were small pools of water, a pair or two of these birds gave variety to the scene: indeed, although we met with their eggs upon the margins or on islets on some of the larger lakes, they seem greatly to prefer those smaller pools of water which are frequent upon the low flat islands of the sea, or upon the boggy surface of the higher lands.

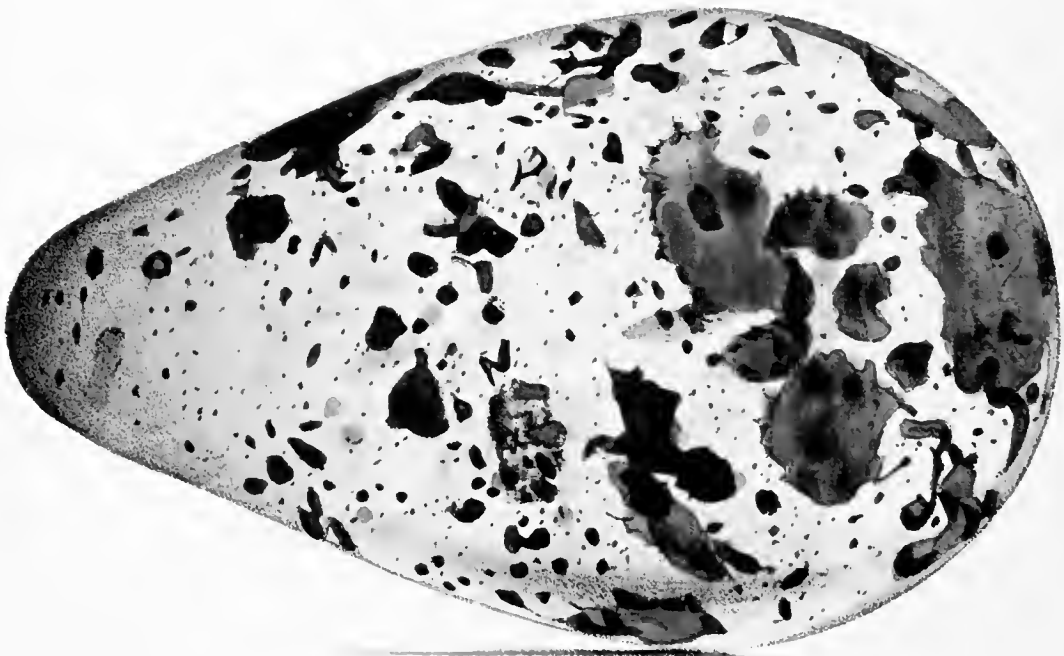
The birds were very shy and wary, and would only in a few instances, when we were standing near their eggs, approach within gunshot of us. We one day found two of their young ones on a very small piece of water upon an island, and whilst endeavouring to secure them, the old birds continued to pass to and fro over our heads with great ra-

pidity. Their first approach was wary, and far above us, the distance gradually diminishing as their fears became greater, till they came within a few yards of us ; we frequently saw pairs of them passing over the country in an evening, and at a great height ; and at midnight, whilst quietly gliding down one of these calm fiords in our boat, or at rest upon our oars, the singularly wild, loud, melancholy-sounding cry of the Red-throated Diver, would often break the deep and delicious repose of all around us.



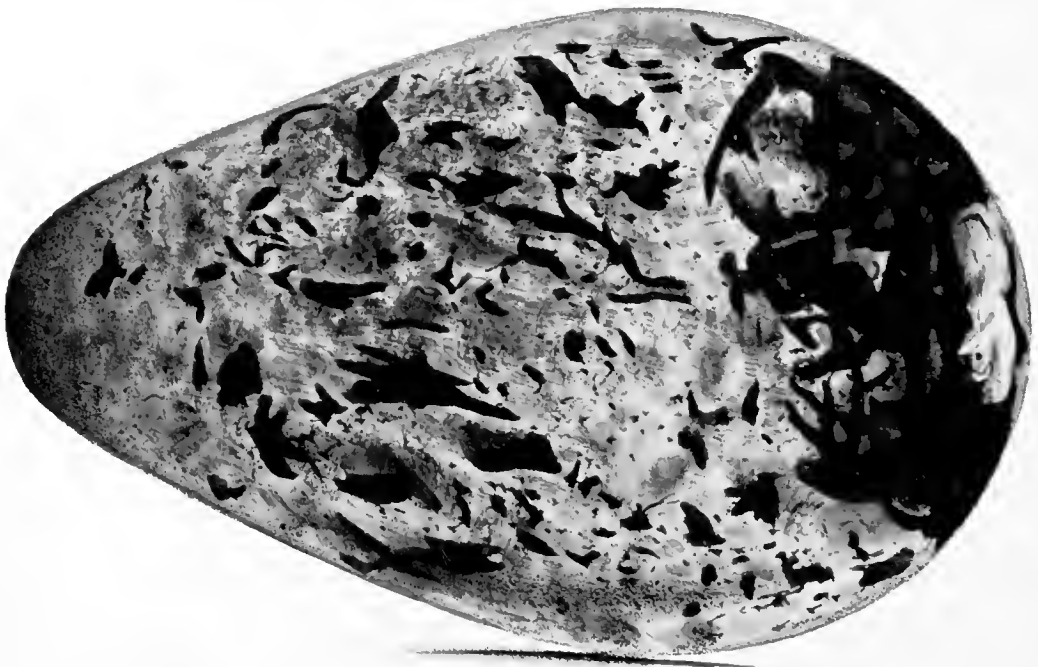


CIX





CX.



*NATATORES.**ALCADÆ.*

COMMON GUILLEMOT,  
FOOLISH GUILLEMOT, TARROCK.

URIA TROILE.

PLATES CIX. AND CX.

THE GUILLEMOT is an exceedingly abundant bird at most of the breeding-places of sea-fowl upon our coast, animating the otherwise sombre and silent rocks, and covering with its brilliantly-coloured eggs the ledges of the perpendicular cliffs which dip into the sea. At the Fern Islands they occupy a rock, or stack, as such rocks are very appropriately called, which stands apart from the islands, surrounded by the sea, and cover it so completely that at a short distance they have the appearance of a stratum of the stone. The eggs are so close together that it is difficult to move amongst them ; and the surface of the rock being whitened over by the dung of the birds, the blue ones especially have a peculiarly beautiful appearance.

At a short distance is a low flat rock, which the cormorants are in the habit of appropriating to themselves ; and though the situation is altogether different from those usually chosen by them, a few Guillemots occasionally lay their eggs amongst the thickest ranks of the cormorants, having a singularly ludicrous appearance amidst their taller neighbours, as they sit bolt upright upon their lofty nests. It has always been to me a matter of wonder that the eggs of the Guillemot are not swept altogether into the sea by the severe gales of wind by

which these unsheltered rocks are visited. When coming unexpectedly upon the breeding-places of these birds, I have observed that several of the eggs were precipitated into the sea by their too hasty flight ; and great must be the destruction both of eggs and young ones, for many of the ledges of rock upon which they are laid are barely wide enough to hold them. Were the eggs of the Guillemot shaped like those of the majority of birds, nothing could save them ; their form, which is peculiar to themselves amongst the eggs of the sea-fowl, is their only protection ; it gives them greater steadiness when at rest, and where they have room to roll, the larger end moving round the smaller in a circle, keeps them in their original position : when placed upon the centre of a table and set in motion, they will not wander far.

To any one who can derive pleasure from observing the habits of birds, and seeing them in their own wild native haunts, one of their larger breeding-places must afford a pleasure which few things can give. I shall never forget the sensations of delight with which I have myself visited some of those in Shetland ; the wild magnificence of the rocks, beautifully tinted here and there with many-coloured lichens, was alone sufficient to excite feelings of the most intense enjoyment, and far more so when peopled with tens of thousands of these interesting beings, covering their dark and barren sides from the sea upwards to a thousand feet above its deep blue waves, each species occupying its own particular position ; the kittiwakes first filling the ledges of the rock at a few feet from the surface of the water ; the Guille-mots, the razor-bills, and the puffins next above them ; and high over all the greater and lesser black-backed and herring gulls. The multitudes passing around you in their busy flight, in strong contrast to each other,—from the slow, majestic, eagle-like soar of the greater black-backed gull, to the rapid, short-winged, bustling flight of the puffin—the various

mingled eries of the different species—the loud bark of the greater black-backed gull—the distinctly repeated cry which has given its name to the kittiwake—and occasionally, as something unusual seemed to pervade the dense rows of Guillemots, a loud hoarse murmur, like the cheering of some distant multitude, together with the constant motion of the freshening sea, and the loud beating of the surge against the rocks—all contributed to render this one of the finest scenes in nature.

Whilst upon its egg, the Guillemot, which well merits the name of foolish, will remain so stupidly seated as to allow a noose at the end of a long stick to be passed around its neck, by which means immense numbers of them are annually taken by the inhabitants of St. Kilda, who subsist almost entirely on sea birds.

The Guillemot lays one egg only, towards the end of May or beginning of June ; the ordinary egg is amazingly large in comparison with the size of the bird ; I have, however, seen one which far exceeds those of the plates in its capacity ; it measures in length, over the surface of the egg, five inches, and in circumference seven inches and a quarter, or one inch and an eighth more than common. The size of the Guillemots egg is most striking when compared with that of other birds.

The weight of the bird itself is about twenty-four ounces ; that of its egg\* three ounces and seven drachms.

The weight of the large egg I have just mentioned is five ounces, seven drachms, and forty grains.

The weight of the common crow is about nineteen ounces ; that of its egg is only five drachms and forty-nine grains.

The weight of the ring-dove is twenty ounces ; that of its egg five drachms and thirty grains.

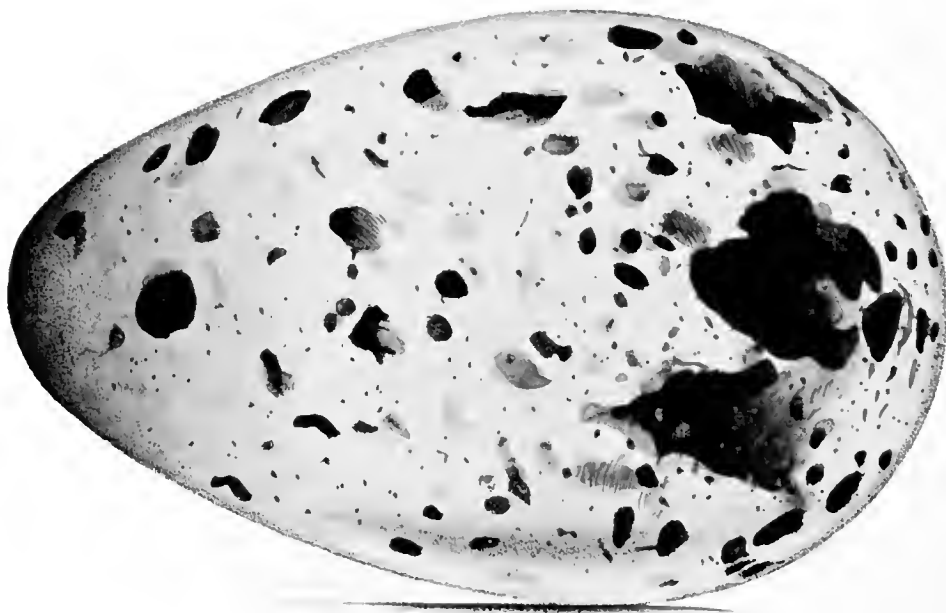
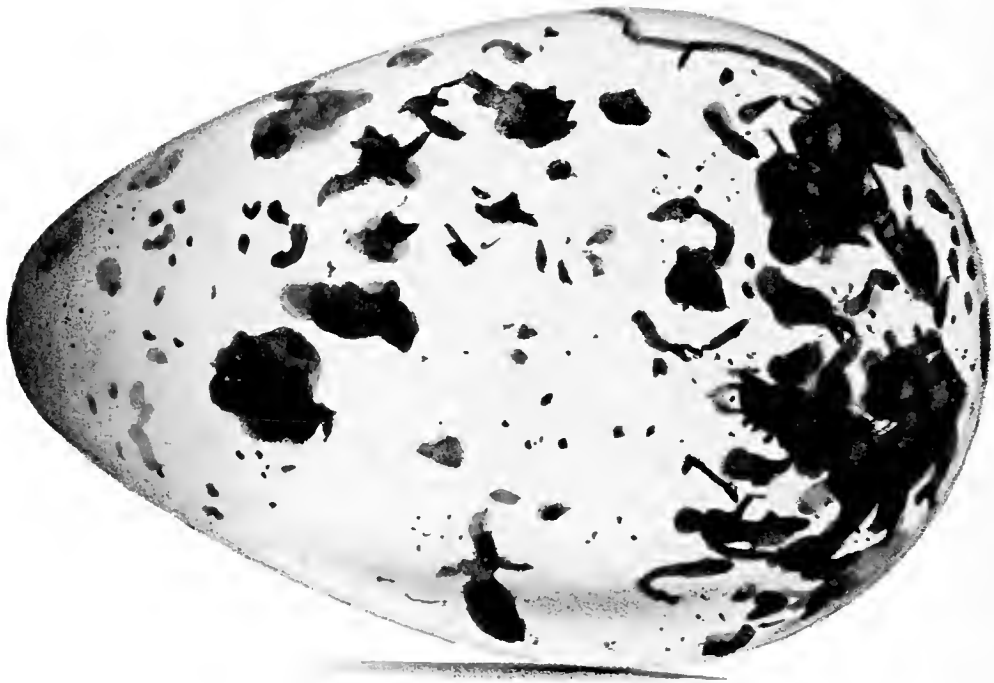
\* The above weights are not the correct weights of the fresh eggs, but merely of the shell filled with water ; they answer the same purpose for comparison.

No eggs can vie with those of the Guillemot in variety and richness of colouring ; those of the blue and white ground-colour are of about equal occurrence. I have figured four of the most remarkable in the collection of Mr. J. Hancock, which was selected from many hundreds ; some varieties are perfectly white.





CAI



*NATATORES.**ALCADAÆ.*

## BRUNNICH'S GUILLEMOT.

URIA BRUNNICHII.

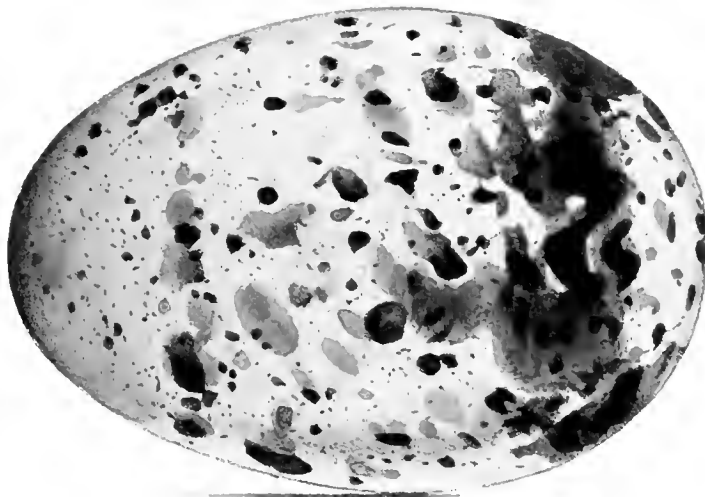
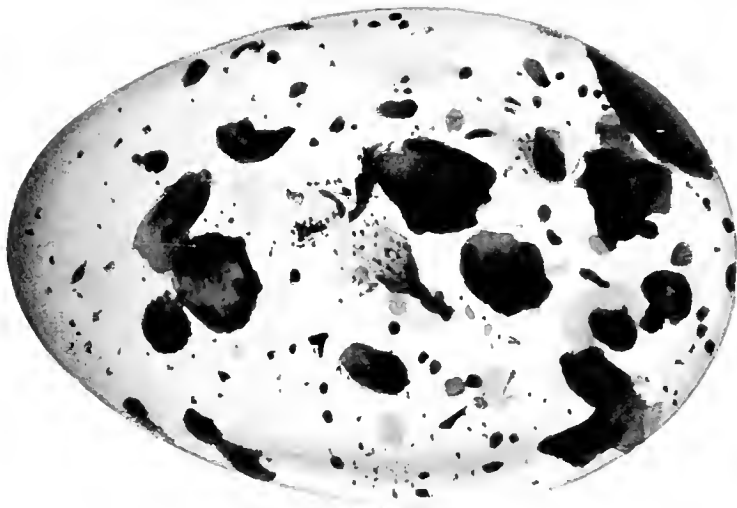
PLATE CXL.

THE eggs of this species, although very closely resembling those of the common guillemot, may almost always be readily distinguished from them; they are shorter in proportion to their breadth, and much more rounded towards the smaller end, and in shape more like eggs of the razor-bill; they may resemble some eggs of the common guillemot in contour, but are never so elegant in their form as the eggs of that species. In colour they are even more rich and varied. Mr. Hancock has a large draw filled with varieties of this egg, and it is one of the most beautiful sights of the kind I have ever seen: from these I have chosen the figures of the plate; the first to represent the appearance most frequent; the second, a variety of a lovely green—a colour which, though not very uncommon here, is never seen in the eggs of any other British bird. The eggs of Brunnich's Guillemot run through all the white-coloured varieties of the other species; but Mr. Hancock tells me, after examining several hundred specimens, that however white the ground-colour may appear to be, the shells of the eggs, upon holding them to the light, are always dyed with greenish blue, which is not the case with eggs of the common guillemot, the ground-colour of which is often tinted with yellow. The eggs of this bird are seldom fantastically streaked or smeared

with colour all over, like those of the other species ; they are sometimes very regularly and beautifully marked all over with small spots, like eggs of the black guillemot, and have altogether a neater and cleaner appearance than those of the common guillemot. The eggs in the collection of Mr. Hancock, were brought by some of the whaling-ships from Greenland, where this bird breeds in vast numbers. It is also met with in Iceland during the breeding-season. Like the allied species, it lays its single egg upon the bare rock.



CXII



*NATATORES.**ALCADÆ.*

## BLACK GUILLEMOT.

URIA GRYLLE.

PLATE CXII.

THE seas of Shetland are everywhere enlivened by the presence of these pretty birds, and great numbers of them breed amongst the rocks round which they flow. The Black Guillemot is also met with on the Orkneys, and Western Isles of Scotland, and Montague says that a few of them breed in Wales near Tenbigh. They make no nest, but lay their eggs, which are always two in number, in such situations as the place affords. On some of the islands which present a steep precipice to the sea, they make use of holes or crevices in the rocks, in which the eggs are laid at various distances from the mouth of the hole, from one to two feet, which is most usual, to three or four; on other islands less precipitous, it deposits them in cavities under or between fragments of rock and large stones, with which the beach is strewed. In one place, several pairs rear their young ones in crannies between the stones which form the ruins of an old wall on the top of a single rock at sea, and at an elevation of fifty or sixty feet above its surface. The Black Guillemot resorts annually to the same holes which were well-known by the boys who accompanied me in search of their eggs, who went immediately to the places where they had taken them in previous years, and were usually successful in again finding them. This species is rather

later in its time of incubation than the common guillemot, razor-bill, or puffin; I obtained two eggs on the sixth of June, but the generality of them were not laid before the fifteenth or sixteenth of the same month, when I had the satisfaction of examining about seventy specimens—then nearly all fresh laid. Amongst so many, I was surprised to find so little variation: two specimens, instead of having the usual bluish colouring, were warmly tinted with pink; and one only—and I have never seen another like it—was coloured as the second figure of the plate; all the rest bore a general resemblance to the first figure; about one half of them differed from it only in having the ground-colour white, instead of blue, the spots for the most part smaller, and more regularly disposed; they resemble the eggs of the razor-bill much more than those of the common guillemot, both as to shape and character. The tyste, by which name this bird is known in Shetland, sits very close, and is easily caught upon its eggs; it frequents and seems very partial to those still deep inlets of the sea, there so numerous, in which the water is so beautifully clear that I have observed them, when standing two or three hundred feet above them, using their wings in diving, or as it were flying under water as distinctly as I have seen them skimming over its surface; it is not nearly so expert in diving as the razor-bill and common guillemot, and when disturbed usually takes to flight, passing very close to the surface of the waters; it is, however, strong upon the wing, and rises with ease to the precipices in which it breeds; its feet, when alive, are very beautiful, and of the brightest coral red. Mr. Salmon tells me that on Papa Westra, one of the Orkney Islands, the Black Guillemots are so common, that he has seen two or three of their nests under one piece of rock.





CXIII



*NATATORES.**ALCADAÆ.*

## LITTLE AUK.

## MERGULUS MELANOLEUCOS.

PLATE CXIII. FIG. 1.

ALTHOUGH periodically driven upon our shores, and sometimes in considerable numbers, during the months of winter, this beautiful little bird has its home much farther north. It is abundant on some parts of the shores of Greenland, where it breeds, and from whence both the birds and eggs have been brought to this country by the sailors employed in the Greenland fishery.

Mr. Proctor, who met with this species in Iceland, says that it is very local, and confined to the Island of Grimsey, which lies to the north of the mainland, and forty or fifty miles distant from it; that it makes no nest, but deposits its single egg upon the bare ground, amongst and under the large stones which have fallen from the cliffs above. The birds would allow him to turn over the stones and take them off their eggs; he found from twelve to fourteen of the eggs on the second of July, then far advanced in incubation. Most of these eggs are slightly spotted with rust colour, but few so distinctly as the one figured.

NATATORES.

ALCADÆ.

## PUFFIN.

SEA PARROT—COULTERNEB—TOMMY NODDY.

FRATERCULA ARCTICA.

PLATE CXIII. FIG. II.

THIS very singular bird breeds on many parts of our coast, and in various situations. A few of them resort annually to one of the Fern Islands on the Northumberland coast, where they lay their eggs in an old rabbit-warren, now thickly overgrown with long grass, and, Mr. Selby says, frequently excavate fresh burrows for themselves. In the Shetland Islands, where they breed in immense numbers, they have in some places taken up their abode high above the ocean, in clefts and crevices of the rock, or in horizontal holes in the softer strata, formed, no doubt, by themselves, for which their curious and powerful bills seem fully adequate. In another place they occupy a grassy slope, which occurs midway in the precipice, and rear their young ones under the large stones and fragments of the falling cliff with which it is strewed.

Whilst in Norway, we visited an island which was tenanted by such countless multitudes of this species, that we could distinctly see them on the wing like a dark cloud upon the horizon, when at a mile distance from them. When we reached the spot, it was to enjoy one of the most interesting sights I ever witnessed. The island, which sloped gradually upward from the edge of the water to the base of

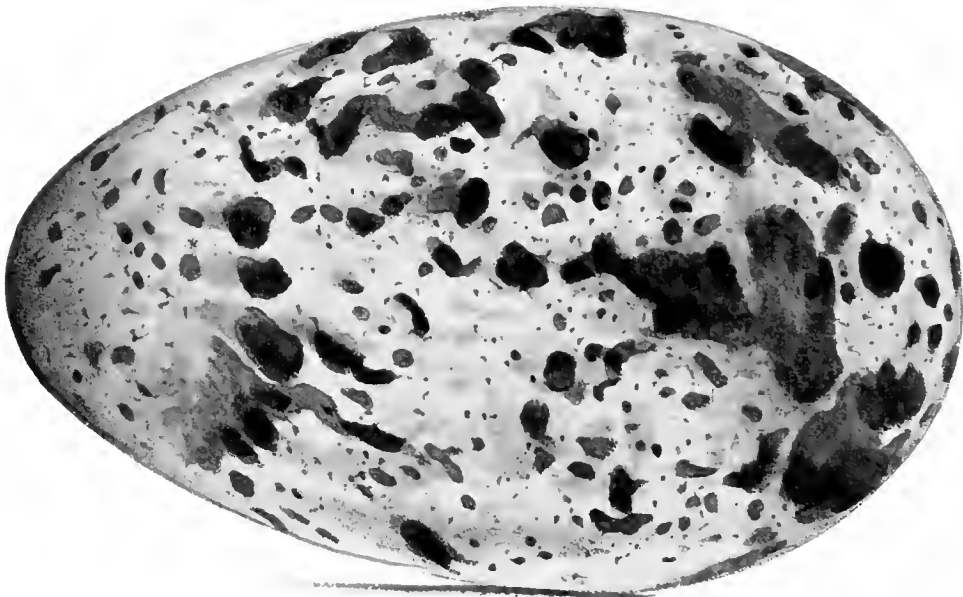
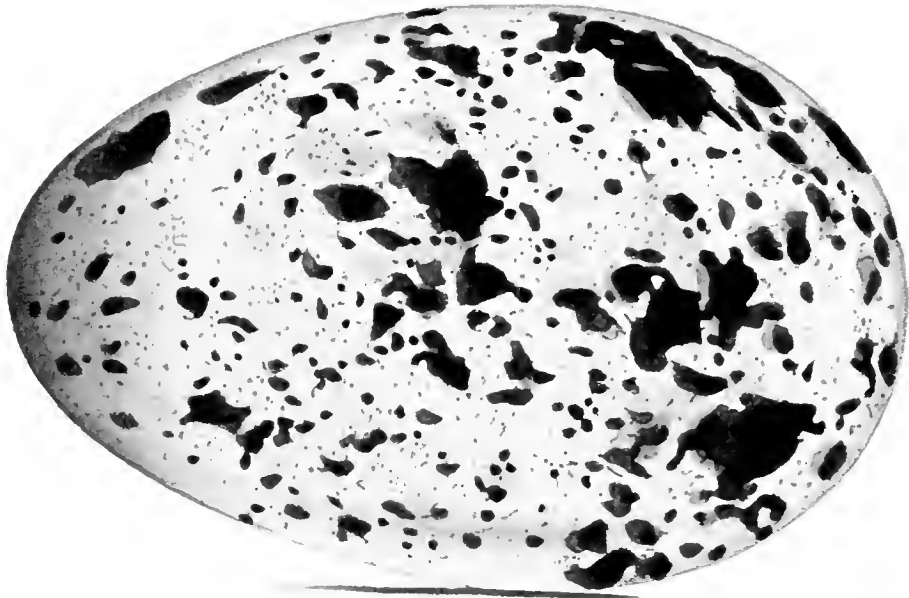
a lofty cliff, was entirely covered with large fragments of rock piled upon each other in the wildest confusion, and under them vast numbers of these birds were breeding. Many thousands were passing in rapid flight around us, and thousands more were underneath our feet; as we stumbled onwards, we could distinctly hear them as we passed over their heads, croaking and gabbling to each other, and no doubt complaining of our intrusion. Tired with our walk, we sat down to enjoy the novelty and wild magnificence of the scene, and thousands of the birds settled near us. Every point of rock around us was covered with them, in the most beautiful groups, and hundreds were within gunshot of us at one time, some of them paying court to each other, puffing out their breasts, and putting themselves in the same ludicrous attitudes in which we often see the various breeds of pigeons. The Puffin lays but one egg, sometimes spotless, but more frequently marked with various tints of colour, but so very faint and indeterminate as to appear as though they were seen through the shell; the one figured, is from the collection of the Messrs. Tuke, and is the most beautiful specimen I have ever seen. The nest, when any, which is only sometimes the case, is composed of a small quantity of grass placed in a hole at the depth of two or three feet. The bird sits very closely, and will allow itself to be caught upon the nest; of this I have often had very feeling experience when seeking for its egg, and after thrusting my arm into various holes to no purpose, have at last had notice of my success by the no means pleasant gripe of its sharp and powerful bill, with which it lays such tenacious hold of the finger, that you may draw it out.

The usual time of breeding is late in May, or at the beginning of June.





CXIV





*NATATORES.**ALCADÆ.*

## RAZOR-BILL.

*ALCA TORDA.*

PLATE CXIV.

LIKE the guillemot, the Razor-bill breeds abundantly on some of the rocky cliffs of our sea-coast, and, like it, lays a single egg, which is sometimes found, like those of the guillemot, upon the bare unsheltered rock, at other times within a hole or cranny of the cliff. The eggs are never blue, nor so elegant in their form as the eggs of that bird, from which they are readily known. They are less, much shorter in proportion to their breadth, and regularly rounded at the smaller end. They are subject to great and endless variety; the first figure is chosen as an average specimen of their usual colouring; the second is a variety by no means uncommon. The Razor-bills breed towards the end of May, or beginning of June; they are then numerous in the Western Isles, in Orkney, and Shetland, and great numbers of their eggs are taken yearly at Flamborough Head, which is one of their most favourite places of resort.





CXV.



*NATATOIRES.**ALCADÆ.*

## G R E A T   A U K.

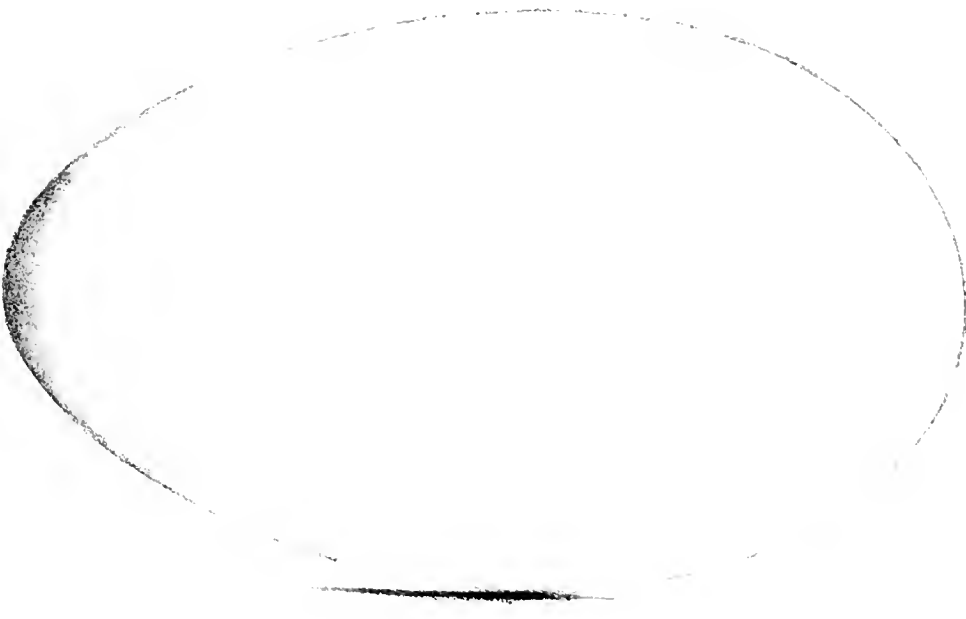
A L C A   I M P E N N I S.

P L A T E   C X V.

WE know little further with regard to this species than that it is an inhabitant of more northern regions than our own, and that a stray specimen has once or twice reached our shores; it is now, however, becoming very scarce, and difficult to obtain. Mr. Proctor sought for it to no purpose in Iceland; and the captains of some of the whaling-vessels, who know birds well, have never seen it on the shores of Greenland; the eggs are consequently very rare. They are most like those of the guillemot in shape, but are less pointed; they are, too, like the eggs of that bird, streaked as well as spotted. The egg from which the drawing is made is in the collection of Mr. Hancock; others are in those of Mr. Yarrell, Mr. Wilmot, Messrs. Tuke, and Mr. Leadbeater.









*NATATORES.**PELECANIDÆ.*

## CORMORANT.

PHALACROCORAX CARBO.

PLATE CXVI. FIG. 1.

THE CORMORANTS sometimes breed upon the ledges of precipices, but choose in preference those rocks which, standing isolated, are surrounded by the sea, upon the tops of which they make their nests. On the Fern Islands, where about forty or fifty pairs breed, they occupy a low flat island, slightly elevated above the water, and confine themselves to one particular and very limited part of it. One of the breeding-places of these birds affords a very interesting, and at the same time a ludicrous sight, and, were Cruikshank an ornithologist, would furnish him with some good sketches. Should you approach the Cormorant Island to leeward, you will, long ere you reach it, have notice of its neighbourhood by the strong nauseous smell which taints the passing breeze. At first sight, the island, which is whitened with the dung of the birds, resembles the limed top of a wall, in which are stuck pieces of broken glass; when, on a nearer approach, the lank upright figures of the birds become visible, they have the appearance of an assemblage of so many long-necked French wine-bottles. Before you arrive within gunshot of their nests, after raising their long necks to their utmost perpendicular stretch, and looking wildly round them, and ducking their heads up and down two or three times, they suddenly assume a horizontal posi-

tion, and, leaving their nests, pass around you once or twice, and then retire to some neighbouring rock, where they remain for a time quietly seated ; and then, as if impatient of your delay, again rise and wheel round you as before. A flock of Cormorants thus on wing is a most curious sight. On landing, it is by no means easy to obtain a sure footing ; the rock is entirely covered with the dung of the birds, and is very slippery and intolerably fœtid. The nests, which are placed at short distances from each other, are large, and sometimes singularly lofty, measuring upwards of two feet in height. They are composed of a large quantity of the coarser sea-weeds, and lined with finer weeds and dry grass. Their eggs are four or five in number ; the outer surface, which is soft and chalky, is easily scraped off with a knife, and, in places where it is deficient, discovers a hard shell of a bluish green colour.

*NATATORES.**PELECANIDÆ.*

## SHAG.

GREEN CORMORANT.

*PHALACROCORAX CRISTATUS.*

PLATE CXVI. FIG. II.

IN its habits and nidification, the Shag greatly resembles the cormorants: like them, it is sometimes found breeding in society upon the top of a rock surrounded by water; but more frequently in solitude, preferring for its nest the ledges and apertures on the face of some lofty cliff, where it may be seen, here and there, perched upright upon its nest, and sometimes only a few yards above the sea; at other times upwards of a hundred feet in height, and usually in places exceedingly difficult of access. I have many times, when climbing for its eggs, been sadly tantalized by seeing them within a few yards of me, without a possibility of obtaining them. They are, like those of the cormorant, outwardly of a soft chalky substance, which is easily scraped off, leaving a hard greenish shell beneath. When fresh laid they are white, but soon become daubed and stained all over, like the eggs of the grebe, by the materials of which the nest is formed: they are four or five in number. The nest is formed of a considerable quantity of sea-weed, lined with the finer species and dry grass.

NATATOIRES.

PELECANIDÆ.

## GANNET.

SOLAN GOOSE—BASS GOOSE.

SULA BASSANA.

PLATE CXVI. FIG. III.

SOLAN GEESE breed together in great numbers, and are chiefly confined to the following localities on the British coast:—Ailsa Crag in the Frith of Clyde, Souliskerry near the Orkneys, the Bass Rock in the Frith of Forth, which is whitened with their numbers, and the far St. Kilda, where, with various other sea-birds, they form almost the sole food of these poor people, who capture them in great numbers, whilst seated on their eggs, by means of a noose of hair, which, being fastened to the end of a long stick, is slipped over the heads of the birds, by which being drawn off their legs, they are soon strangled; thousands of the sea-birds thus caught are either eaten whilst fresh, or dried for winter store. It had long been one of my most dearly-cherished bird-nesting schemes to visit St. Kilda; it was, therefore, greatly to my delight that I found myself one of a steamboat party, on my way to that island.

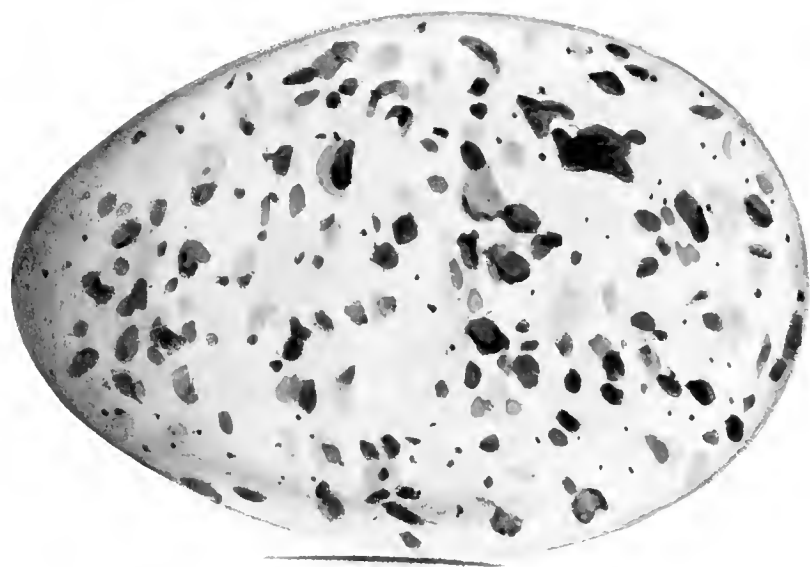
The weather had been stormy, and the long unbroken swell of the Western Ocean, which met us as we got sight of the lonely isle, was everywhere enlivened by multitudes of Gannets, which were either winging their way home, or buoyantly floating over each succeeding wave. The shear-water petrel, too, was skimming with great rapidity over the

surface of the water, following the rise and fall of every billow. It was all we saw of the feathered inhabitants of this lonely spot. When we reached the island, every wing was motionless ; it was night, and the full moon was throwing its bright light upon those rocks which, now so hushed and still, would again on the morrow swarm with life. We were to have spent a day amongst the islands ; but, in consequence of our boat having been delayed two days in the Sound of Harris by bad weather, our captain was compelled to summon us on board after a short visit to the humble huts of the natives. Everything around us proclaimed the destruction of our favourites ; mud-houses, the public store-rooms of the village, were filled with dried birds for winter store ; large packages of feathers—the coin with which they pay their rent—were in every house ; and loose feathers, birds wings, and bones were everywhere strewed, thick and deep : the lamps, too, which they were burning, were fed with oil from the fulmar petrel. At the great breeding-places of this species which I have mentioned, they build their nests upon every shelf or projecting ledge of rock which affords room on the steep sides of the precipices. It is formed of a considerable quantity of sea-weed and dried grass, upon which is deposited the single egg, which, when first laid, is of a pure white, the harder shell being covered over outside with a coating of a chalky substance.





CXV





*NATATORES.**LARIDÆ.*

## CASPIAN TERN.

STERNA CASPIA.

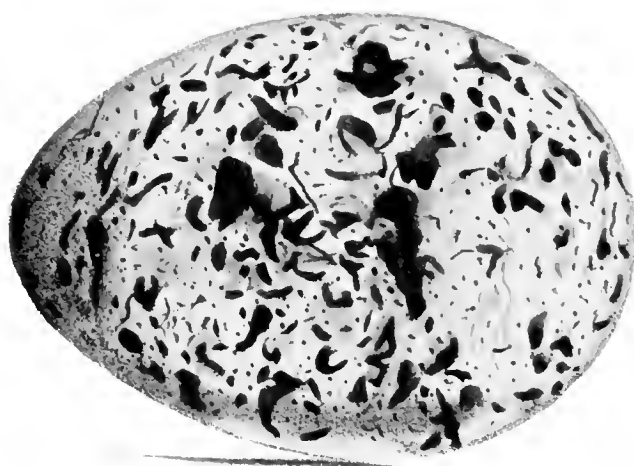
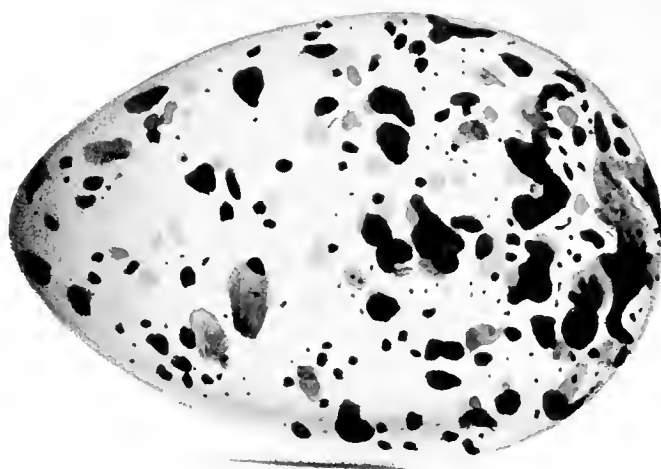
PLATE CXVII.

THE CASPIAN TERN is a rare British bird, and, though little is known with regard to its summer habits, there cannot be any doubt that they bear a close resemblance to those of the other species of Tern, since the eggs are similar. This bird is said to make no nest, depositing its eggs, which are two or three in number, either upon the bare rock or in some slight depression on the sea-beach.

The Caspian Tern breeds not uncommonly on the island of Sylt on the coast of Denmark, from whence Mr. Hancock has their eggs.







*NATATORES.**LARIDÆ.*

## SANDWICH TERN.

STERNA CANTIACA.

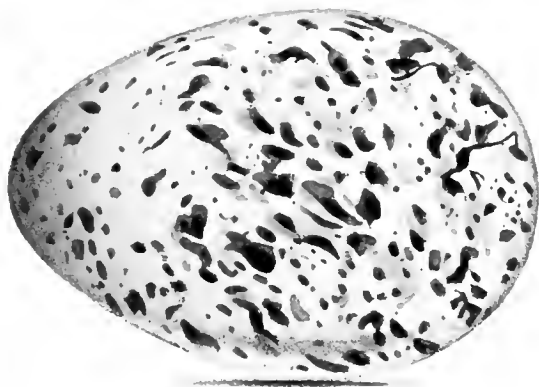
PLATE CXVIII.

Nothing can exceed the beauty and variety of the eggs of this species. During several visits to the Coquet and Fern Islands on the coast of Northumberland, I had the pleasure of picking those selected for the plate from many hundreds, which lay thickly strewed on all sides of us, mixed with those of arctic, common, and roseate terns; indeed, so close were the eggs together, that in many instances we were obliged carefully to pick our steps in order to avoid treading upon them. They were either upon the green grass as it grew, or upon a small quantity gathered together for the purpose. They are mostly two, and never exceed three in number. Of the three varieties in the plate, the first figure represents the most usual appearance of the egg. The Sandwich Tern breeds late, as do most of the sea-birds, and rarely commences incubation till the month of June. I have always found the first week of that month the best time to obtain fresh specimens of the eggs of those sea-fowl which breed on the coast of Northumberland.





CXIX





NATATORES.

LARIDÆ.

## ROSEATE TERN

STERNA DOUGALLII.

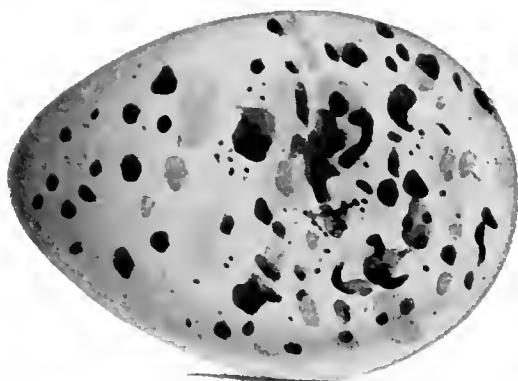
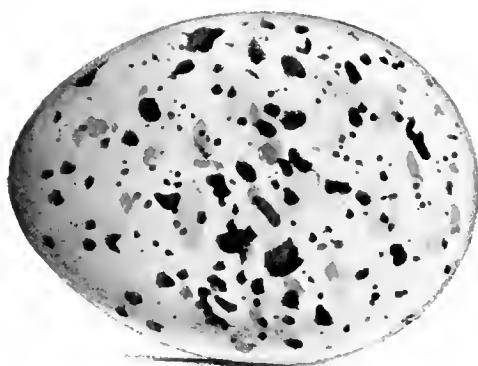
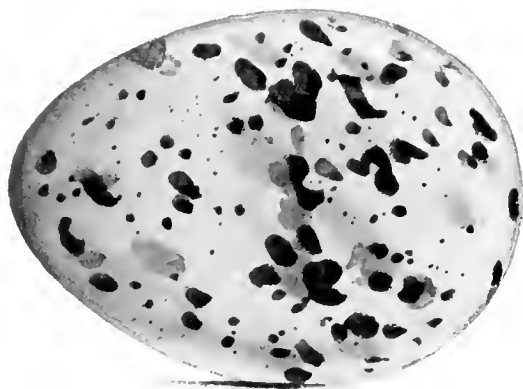
PLATE CXIX.

I AM not aware that the Roseate Tern is ever met with in the same abundance as other species of the genus. Upon the Fern and Coquet Islands, the only places where I have myself had the pleasure of seeing them, they are very limited in number, consisting of a few pairs only, mixed and associating with the large flocks of arctic and common terns, from the many thousands of which it is by no means easy to distinguish them. Their eggs are likewise laid amongst those of the other species, and so much resemble large oblong varieties of the eggs of the arctic and common terns, that the only means of ascertaining them with certainty is by watching the bird settle upon the nest. They seem, however, to be more constantly of a lighter colour, and more covered with minute spots than the eggs of the other terns; are larger, and usually longer in proportion to their breadth. The second figure of the plate is from a variety of rare occurrence. The eggs are two or three in number, and are deposited either upon the bare ground, or upon a small quantity of dry grass. Mr. J. Hancock found this species breeding in numbers upon Foulney Island on the coast of Lancashire, and forming there a much larger proportion of the dense flocks of terns which resort to that side of the island, than it does on the coast of Northumberland.





CXX



NATATORES.

LARIDÆ.

## COMMON TERN.

SEA SWALLOW.

STERNA HIRUNDO.

PLATE CXX. FIG. I.

WITH this species the arctic tern had long been confounded, till their true distinctions were pointed out by Mr. Selby. The *sterna arctica* is the common tern of the north of England; whilst the *Sterna Hirundo*, a few pairs of which only breed upon the Coquet and Fern Islands, is comparatively rare. I have received the eggs from Mr. Heysham, with the following communication:—"The Common Tern breeds near the western extremity of Rockcliff Salt-marsh, at no great distance from the junction of the rivers Eden and Esk in Solway Frith. This is the only locality they resort to in this district to my knowledge, with the exception of a few pairs, which breed, I believe, almost every year on Solway Moss. In some seasons, they commence to lay their eggs about the latter end of May, and fresh ones may be obtained until the beginning of July." Mr. J. Hancock found the eggs of this species plentiful on Foulney Island, on the coast of Lancashire. The Common Tern breeds at many places round the southern coast of England. It makes little or no nest, laying its eggs, which are three in number, upon the bare grass or sand.

*NATATORES.**LARIDÆ.*

## ARCTIC TERN.

STERNA ARCTICA.

PLATE CXX. FIGS. II. AND III.

THE ARCTIC TERN, which is the most abundant of this genus, breeds, together with the Sandwich tern, in great numbers upon the Fern and Coquet Islands—on the latter especially, where they are protected from destruction by the Duke of Northumberland. The two species seem to be very sociable; and though they breed together, as it were, and appear mixed, yet in passing over the island, and examining the many hundreds of eggs that lay around me, in order to obtain contrasting varieties, I found that they were generally in small distinct groups. The number of eggs, all laid within a small space, and confined to one side of the island, which is not altogether more than three or four acres in extent, could not be less than two thousand. Though fine gravelly sand seems to be the favourite position for their eggs, there being no such beach upon the island, these were all deposited upon the grass, where the birds had usually scratched a hole, and lined it with a small portion of fine dry grass. The eggs, which are usually laid at the beginning of June, are always two or three in number, and for the most part so entirely like those of the common tern, that it is quite impossible to distinguish them from each other with anything like certainty. Eggs of the Arctic Tern are rarely so large as some specimens of those of the common

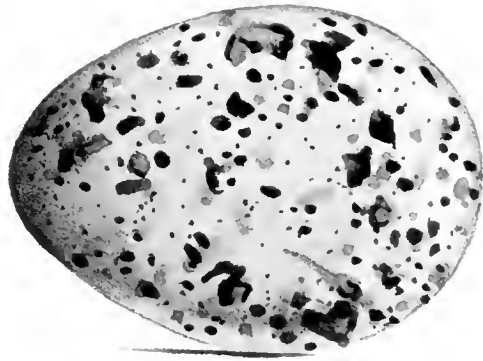
tern ; but they are more frequently so perfectly alike in size, contour, and colouring, that the three figures of the plate, though drawn from eggs of the two species, may be all taken as representing either of them separately. The eggs of both are subject to the same endless varieties, from a ground-colour of white, light blue, or pale yellow, to green and brown, much darker than any figure of the plate.







CXX.✕



NATATORES.

LARIDÆ.

## WHISKERED TERN.

STERNA LEUCOPAREIA.

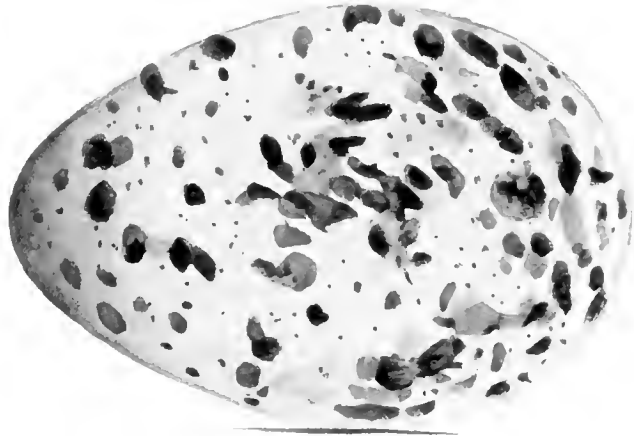
PLATE CXX.\*

UPON the authority of Mr. Heysham, this species, which was shot off the coast of Dorsetshire, has been added to the list of British Birds, and figured in Mr. Yarrell's work. The egg now drawn, which is in the collection of Mr. Yarrell, was given him by Dr. Thienemann, and does not at all differ from eggs of the Arctic Tern.

The Whiskered Tern, although met with in several parts of Europe, appears to be nowhere common.







*NATATORES.**LARIDÆ.*

## GULL-BILLED TERN.

STERNA ANGLICA.

PLATE CXXI. FIG. 1.

THE only egg of this species which I have seen is in the collection of Mr. John Hancock, of Newcastle. It was obtained from the marshes of Sylt on the coast of Denmark, where this species, as well as the caspian tern and many other rare birds, is not very uncommon. It breeds on marshy ground, at no great distance from the sea-shore, and lays two or three eggs, either upon the turf or amongst the fine sand and small gravel of the sea-beach.

NATATORES.

LARIDÆ.

## LESSER TERN.

## STERNA MINUTA.

PLATE CXXI. FIGS II. AND III.

THE eggs of the Lesser Tern, which are more rare, are by no means so variable as those of the rest of the genus. The bird is much less common; and, as far as I have had the means of observing it, very local during the period of incubation.

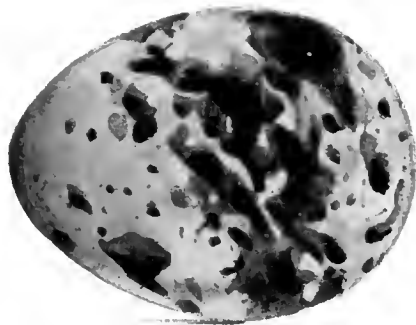
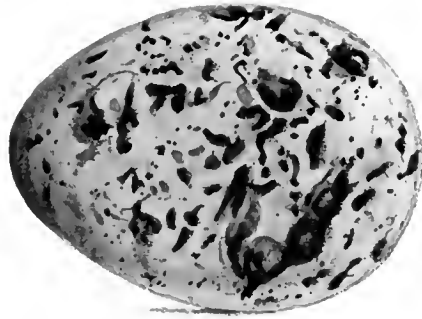
There is but one place on the Northumberland coast where they have yet been ascertained to breed,—a small space of gravelly sand upon the mainland, nearly opposite Holy Island. To this locality about thirty or forty pairs annually resort, depositing their eggs upon those small patches of gravel which are most like them, both in size and colour; and so strong in many instances is the resemblance, that an unpractised eye would find great difficulty in detecting the eggs at first sight. Mr. J. Hancock has carefully brought away the eggs, and the gravel upon which they rested; and even thus, without the spreading beach around them to add to the delusion, the resemblance is very close. The eggs, which are merely laid in a slight depression in the surface of the gravel, are sometimes two, but more frequently three in number. In a ramble along the coast with the Messrs. Hancock, we had the pleasure of finding at the place I have just mentioned between twenty and thirty nests of this bird, and all within a circuit of a few yards. It was the first week



in June, the time at which I have, for some years, obtained their eggs. They seldom differ much from the second figure of the plate, except in the depth of the ground-colour ; figure three is an unusual variety. Mr. Yarrell has found the eggs of the Lesser Tern in considerable numbers at the mouth of the Thames on the Kentish side, about Yanlet Island, and the creek of the same name close by ; and Mr. J. Hancock has taken them on the coast of Cumberland.







*NATATORES.**LARIDÆ.*

## BLACK TERN.

CAR SWALLOW.

STERNA NIGRA.

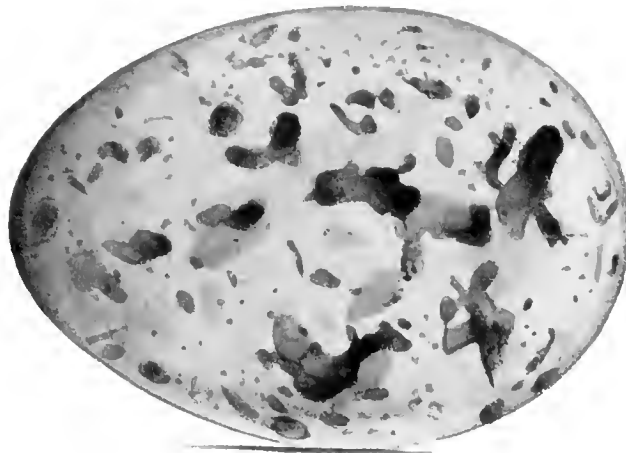
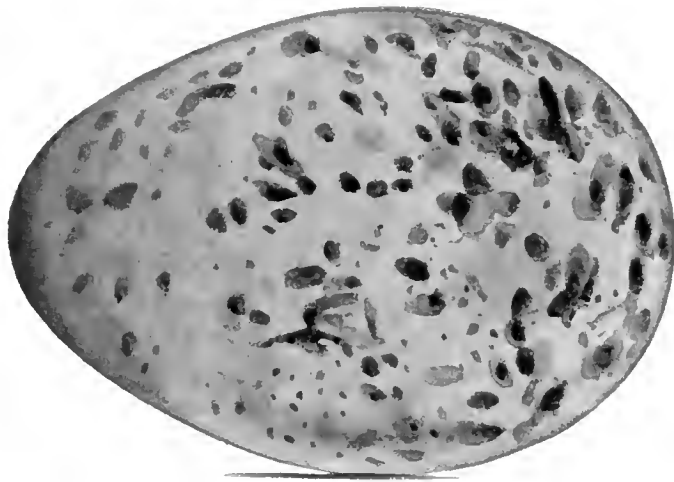
PLATE CXXII.

THE BLACK TERN, which used to breed in numbers in several of the marshy districts of this country, is now confined to a few, and becoming more rare; in some parts of the counties of Cambridge and Lincoln it is, however, still very abundant. Although closely allied to the other species in most respects, the Black Tern differs from them a good deal in its nidification; and, whilst all the other species choose the near neighbourhood of the sea, and usually resort to those places which are the most free from moisture, placing their eggs most frequently upon the arid sand, the Black Tern prefers inland marshes and pools of water, laying its eggs upon tufts of rushes and grass, sometimes in very wet situations, and barely raised above the surface of the water; its nest is composed of flags and coarse grass. Mr. Salmon, whose liberality supplied me with a series of the eggs of this species, from which I have selected the figures in the plate, tells me that they are sometimes three, but more frequently four in number,—an interesting fact, since the eggs of this species are often somewhat more pointed than those of the other species of terns, which never lay more than three, and

therefore more like eggs of the grallatorial birds, which always lay four eggs.

The eggs sent me by Mr. Salmon were taken by him, with many more, off Crowland Wash, in Lincolnshire, where immense numbers of these birds annually resort to breed towards the end of May or beginning of June.







*NATATORES.**LARIDÆ.*

## BLACK-HEADED GULL.

LARUS RIDIBUNDUS.

PLATE CXXIII.

DIFFERING in its habits from the rest of the genus, the Black-headed Gull usually leaves the sea-shore on the approach of summer, and repairs inland to breed, frequenting for that purpose the margins of marshy grounds, or whitening with its numbers the shores of some of the smaller lakes and ponds.

The most numerous colony which I have seen occupies a piece of water upon the estate of Mr. Askew at Pallingsburn, in Northumberland, where, meeting with protection, they have become exceedingly numerous, and add an increasing and ever varying interest to the grounds, which nothing else could give them; and, though within a few yards of the high road, are undisturbed by its vicinity. At most of their breeding-places they are less fortunate, and are plundered without mercy of their eggs, which, being without that fishy taste which the eggs of the sea-birds have more or less, are very good to eat, the food of the Black-headed Gull being, at this time of the year, chiefly confined to worms and slugs. When thus robbed of their eggs, they are induced to lay a second, or even a third time; the eggs, as Mr. Salmon informs me, decreasing each time in size. Of these second and third layings he has kindly sent me specimens, some of which are one third less than those of the usual

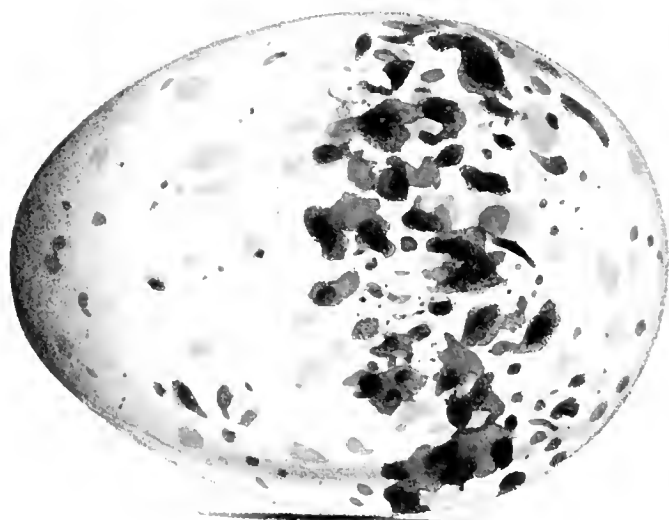
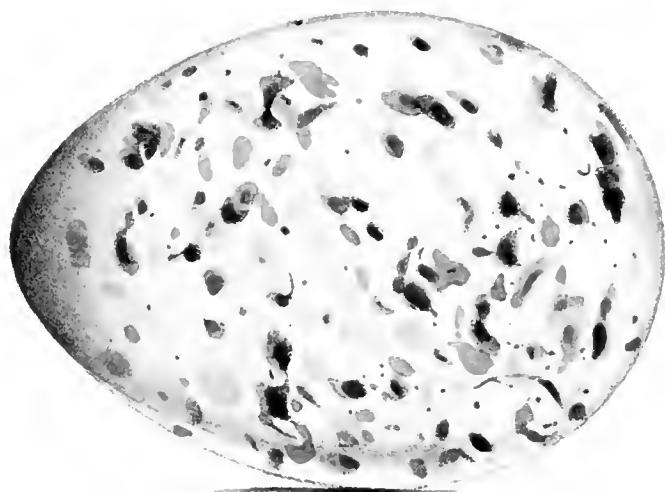
and natural size. I have seen several eggs of this species, which, like those of frequent occurrence amongst our domestic poultry, are misshapen and of very small size. If we adopt the opinion of some naturalists, that the ovarium of a bird contains, from its first creation, all the eggs which it is destined to lay through life, then how soon must these persecuted Gulls be rendered barren and unproductive, perhaps even before they have once had the pleasure of bringing up a family of young ones.

The Black-headed Gull begins to breed much earlier than the other species, and sometimes has eggs at the end of April. May is, however, their usual time of incubation; and during that month I have seen immense numbers of their eggs in the Norwich market, whither they were sent from Scoulton Mere, where the Messrs. Paget state that a man and three boys find constant occupation in collecting them, and sometimes gather upwards of a thousand in a day.

The eggs of this species vary in size and colour more than those of any other gull; the ground-colour is sometimes of a light blue or yellow, and sometimes green, or red, or brown



CXXIV



*NATATORES.**LARIDÆ.*

## KITTIWAKE.

## LARUS TRIDACTYLUS.

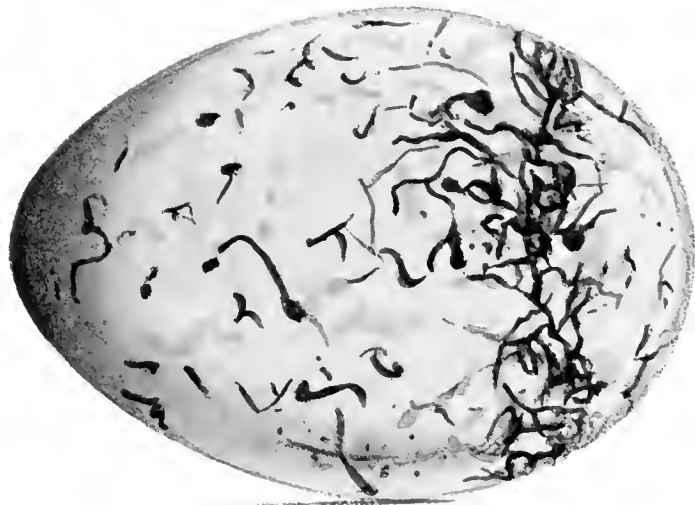
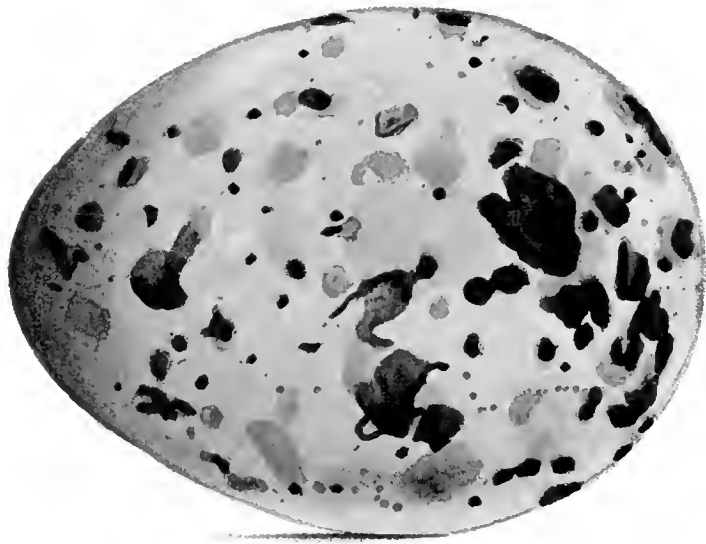
PLATE CXXIV.

THE nest of the Kittiwake is at all times very difficult of access, placed as it is upon the slightest jutting ledge of rock on the face of the most perpendicular precipices, washed or surrounded by the sea. It is formed of a considerable quantity of dry grass and pieces of sea-weed; and, were it not for a mixture of clay, giving it weight and adhesion to the rock, it would be impossible for the eggs or young ones to escape destruction. The Kittiwake breeds in great numbers on various parts of our sea-coast, and is exceedingly abundant on some of the Shetland Islands, especially on the rocks of Unst, the northern termination of our country. We one day left Buraforth—a fishing-station belonging to Mr. Edmonston, the most northerly residence on the British Islands—anxious to explore them. Passing down a narrow forth, on our way to the open sea, thousands of Kittiwakes glided past us, fishing as they went along. These were, however, but a scattered few of the vast multitudes that crowded round us when we reached their breeding-places; the ledges of the rocks were, to a great extent, whitened with their numbers, as much as they would have been by a fall of snow. The sea was spangled far and wide with them as they fished, and equal numbers floated anxiously over us, plaintively pronouncing their clearly articulated cry of Kittiwake. Many

of them would come fearlessly within a few feet of the boat, and would hover stationary over our heads, and so near that we could examine every feather. The whole scene was indescribably wild and delightful. I had found quarters at the house of one of the fishermen, that I might enjoy the magnificent scenery of the rocks around me, and had the next day strolled along the edge of the precipitous cliffs, which we had the day before viewed from their bases upwards. Suddenly everything was enveloped in a dense mist, which, partially clearing, now and then displayed to my view far below glimpses of the busy scene of yesterday. Sauntering along lost to the direction of my homeward way, I observed immense numbers of the Kittiwakes passing over my head inland ; and, being anxious to know their object, I followed in their route, and soon met equal crowds returning, each freighted with a piece of fish. Knowing that they must have been to the harbour for these—the pieces cast away in preparing the fish for salting—I gladly kept company with my friends, and reached home by the shortest route. A storm was coming on, and the sea was running very high ; they had, therefore, adopted this short cut to their feeding-place, in preference to the circuitous course of the forth, where we had met them yesterday. The Kittiwake begins to breed late in May, or early in June, and lays three eggs, differing much in colour and in the position of the spots. A beautiful zoned variety, resembling the second figure of the plate, is more prevalent than amongst the eggs of almost any other bird.



CXXV





*NATATORES.**LARIDÆ.*

## COMMON GULL.

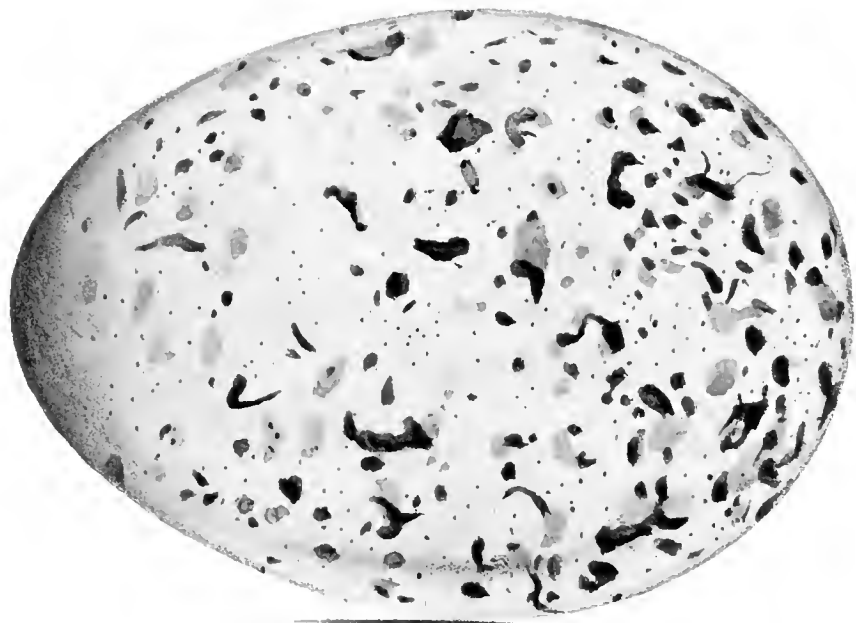
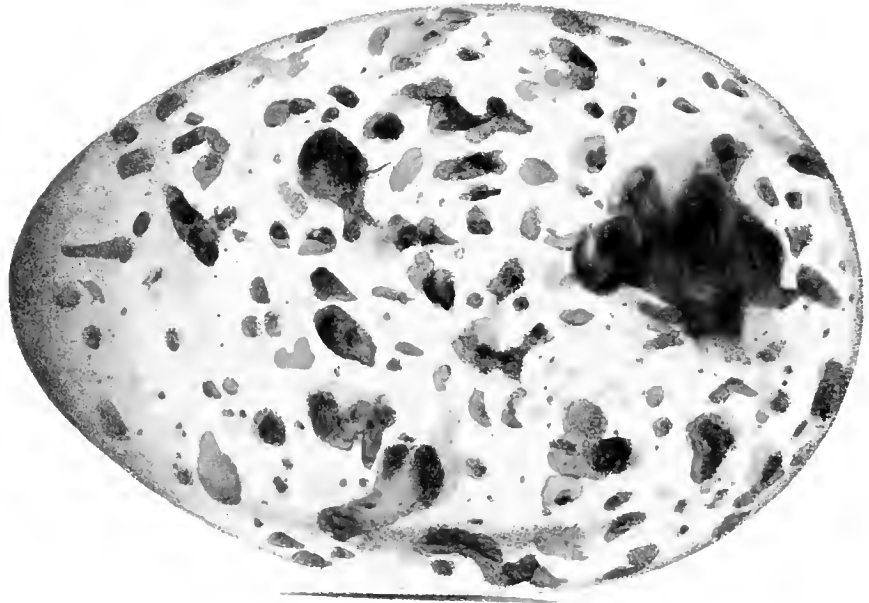
LARUS CANUS.

PLATE CXXV.

THIS GULL is not nearly so common on the English coast as most of the other species. They breed on some of the Western Islands, and also, though few in number, on many of the smaller grassy islands of Shetland. They lay their eggs, which are three in number, sometimes upon the green turf, at other times upon the rock. When in the former situation, the nest is very slight, consisting of a small portion of dry grass; on the latter, it is commonly formed of a larger quantity of materials,—dry grass, bits of turf, and sea-weed. In Norway, this species is so common, that the eggs figured in the plate were selected from upwards of two thousand specimens, which had been gathered by the inhabitants from one island only. They were beautifully varied; some with a ground-colour of light blue, or straw-colour, others green or brown; some a good deal like eggs of the oyster-catcher, others covered all over with minute spots. The first figure of the plate is a good representative of the usual colouring; the second of a rare and very beautiful variety.







*NATATORES.**LARIDÆ.*

## LESSER BLACK-BACKED GULL.

LARUS FUSCUS.

PLATE CXXVI.

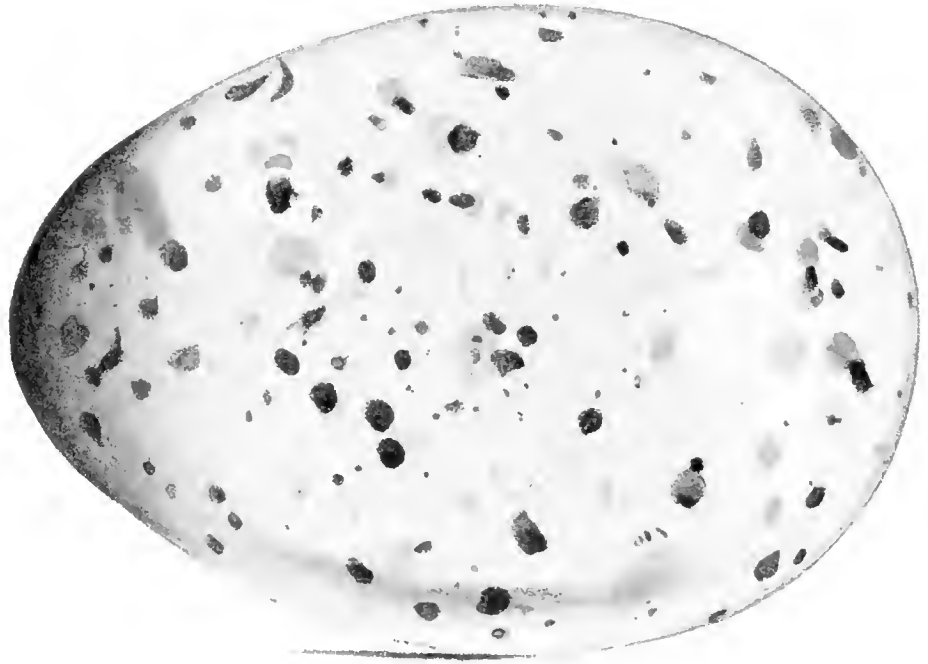
MONTAGU says that on the island of Romsey, on the western coast of England, where the Lesser Black-backed and herring Gulls breed together, the former bears a very small proportion, about one in twenty, to the latter: upon the Fern Islands, however, on our Northumberland coast, it is just the reverse, there being a very few pairs of the herring gull among the Lesser Black-backed, which breed there in great numbers. This species appears to prefer those islands which are the most bare and barren, and upon which there is the least herbage; and, though they have their choice, very few of them deposit their eggs upon the grass,—and yet they rarely lay them without making a tolerably thick nest for their reception: it is of grass loosely bundled together in large pieces, and placed in some slight depression or hollow of the rock. Amongst upwards of a hundred that I examined, one or two only had small pieces of seaweed mixed with the other material. They lay two or three eggs, varying in every tint of colour from the light figure of the plate, to many shades of green and brown; they are in most cases identical with those of the herring gull, but are frequently rather less. This species will frequently leave the coast, and winging its way far inland, will make its nest upon the margin of some lake, or island surrounded by its waters. I have had the eggs from

a small island in the lake of Ullswater, where I have seen the birds during the summer season.

No class of birds is so unerring or so regular in their time of breeding as those which inhabit the ocean ; whilst most of our land birds have been for two months or more irregularly engaged either in building their nests, in incubation, or have already reared their young ones ; they have deferred it to a much later period, and urged by one impulse, the numerous species which inhabit these islands resort to them at once, and all is noise and bustle. This occurs every year upon the Fern Islands, within a few days of the same date of time, the first or second week of June. This late period of their breeding is no doubt influenced by the weather, which, at an earlier season, would, in situations so exposed, be too severe for the rearing of their young ones. After these birds have begun to sit, they become very bold and daring in the protection of their eggs. Whilst amongst them, I was amused by one, near the nest of which I was sitting ; it retired to a certain distance to give it full force in its attack, and then making a stoop at my head, came within two or three yards of me, repeating its attack without ceasing, till I left the place.

Mr. Darling, under whose hospitable roof at the lighthouse I have enjoyed many pleasant hours during my various visits to these islands, informs me that the bonnet of an old woman, who was in the habit of gathering the eggs of the sea-gulls, was riddled through and through, and almost torn to pieces by their bills.







*NATATORES.**LARIDÆ.*

## HERRING GULL.

LARUS ARGENTATUS.

PLATE CXXVII.

THE eggs of this species are so exceedingly similar to those of the lesser black-backed gull, that were a number of them mixed together it would be impossible, except in a few instances, to separate those of the different species. The only characteristic distinction which seems to mark the eggs of this species, and this can never be quite depended upon, is, that they are occasionally somewhat larger than those of the lesser black-backed gull, and marked with larger blotches of colour, as in the second figure of the plate. In places where a choice of situation offers, the Herring Gull seems to prefer those ledges of rock and small patches of grass which sometimes occur on the face of a precipice, but will also make its nest upon the surface of a low flat rock, or grassy island; it is usually larger than that of the lesser black-backed gull, and composed of the same materials, rough grass with pieces of the sod and earth attached to them, and intermingled with bits of sea-weed. The Herring Gull breeds abundantly on various parts of our sea-coast, at Flamborough Head, on the fine cliffs of Sumburgh Head the southern termination of Shetland, on the Isle of Wight, and on the Fern Islands but very sparingly. To the Rev. W. D. Fox I am indebted for the following interesting account of a bird of this species.

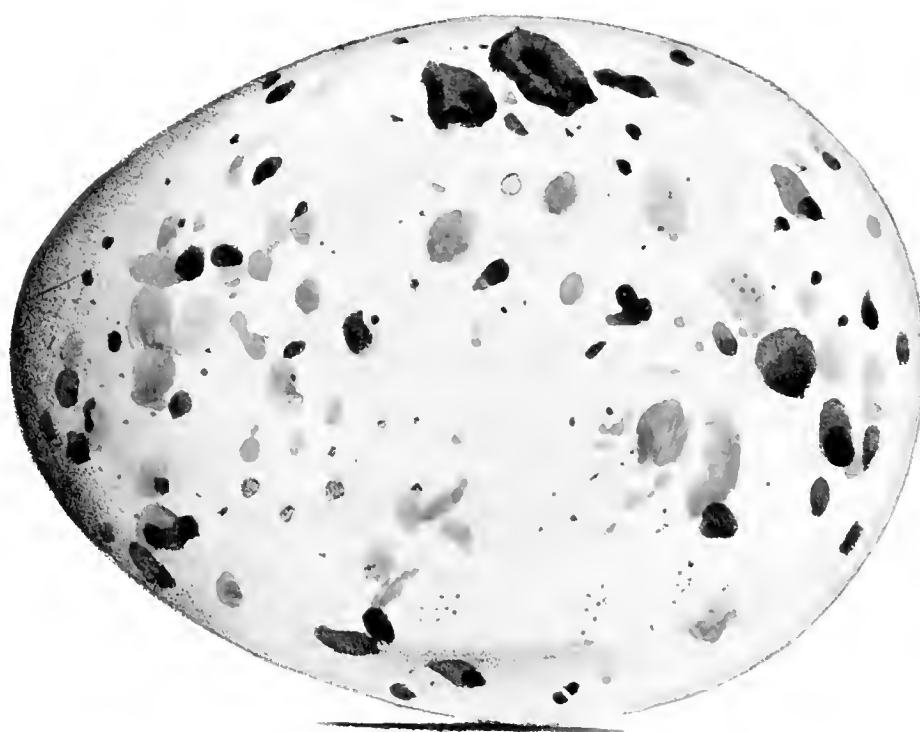
“ At Colbourne, on the Isle of Wight, a Herring Gull

made its escape about thirty years ago from a garden where he had been kept a prisoner. From that time, however, to the present, he has returned all but daily to visit the place of his former captivity, though at the distance of six or seven miles from the part of the coast where they resort. Here he is regularly fed, and is so tame with the man who has regularly attended to his wants, that he will eat out of his hand, but will not allow any further familiarities. In the breeding-season he is accompanied by his mate, who will not venture to descend, but remains hovering and screaming over him whilst he is feeding below."

Interesting as this trait in the life of a wild sea-bird is in itself, it is doubly so as affording a clue by which we may, to a certain extent, ascertain the age to which these birds live.



CXXVIII



*NATATORES.**LARIDÆ.*

## GREATER BLACK-BACKED GULL.

LARUS MARINUS.

PLATE CXXVIII. FIG. 1.

THE GREAT BLACK-BACKED GULL, besides a few localities on the English and Scottish coasts, breeds in abundance on the Orkney and Shetland Islands; but from the care with which it selects one that is difficult of access, either from the precipitous nature of its rocky sides, or from its being surrounded by the waters of some inland lake, where no boat has ever been, is confined to a few of them. On a rock thus situated—for it had always been considered inaccessible, though within a few feet of the island of Noss—these birds had for many years found a secure retreat, till, stimulated by a desire to procure the numerous eggs which covered its grassy top, which could be seen from the neighbouring cliffs, a peasant succeeded in climbing to its summit, and when there, of making fast a rope thrown from the opposite rock, and thus establishing a communication for after years; the benefit of which he, poor fellow! never lived to see, for he was killed in his descent. This communication still exists in the shape of a double rope, which, being passed through holes in the side of a large box, it is suspended and easily drawn across. The eggs being thus carried off, sheep are conveyed over to pasture on the rich grass produced by the guano of these birds. When we were there, this box had not yet been put in readiness for

that year's use ; we had not, therefore, the opportunity of enjoying a bird-nesting excursion so novel.

The Great Black-backed Gull makes a nest of a quantity of dried grass, carelessly heaped together. The eggs are three in number ; and never, I believe, four, as stated by Mr. Selby : they are often very much like eggs of the lesser black-backed and herring gulls, but are generally marked with much larger blotches of colour ; they are, also, for the most part considerably larger ; I have, however, seen several specimens that were very little, if any, bigger than large eggs of the herring gull. Many eggs of this and other species have been passed off by Mr. Dunn as those of the skua gull, to which they bear but slight resemblance : and I have little doubt that Mr. Gould had one of these before him, when he said that the egg of the skua resembles that of the herring gull, in shape and colour. The eggs of this bird are rich and excellent to eat : when boiled the yolk is much deeper in colour than those of the common fowl, and the white transparent : they are, in consequence, a most valuable acquisition to the owners of the islands upon which they are deposited. The custom is to take the whole of the eggs as soon as laid ; and the second set, in like manner, allowing the birds to sit the third time. One gentleman, Mr. Scott, upon whose property they breed, and by whom we were most hospitably received, told us that he had thus secured sixty dozen of their eggs for winter's use, although the island which they frequented, was scarcely half an acre in extent. In Norway, where the numerous small islands afford them such choice of breeding-places, they are much less sociable and widely dispersed : we met with one or two pairs only, on most of the uninhabited grassy isles. In the motionless and expansive flight of these fine birds, together with their loud laughing bark which is at times very much like the cry of that bird, they bear considerable resemblance to

the eagle. I have many times watched a number of them with great interest, when almost beyond my sight, whirling round and round in intersecting circles, and for a length of time without apparently moving a feather of their wings, much in the manner in which, according to Audubon, a tribe of vultures survey the surrounding country in search of food.

*NATATORES.**LARIDÆ.*

## GLAUCOUS GULL.

LARUS GLAUCUS.

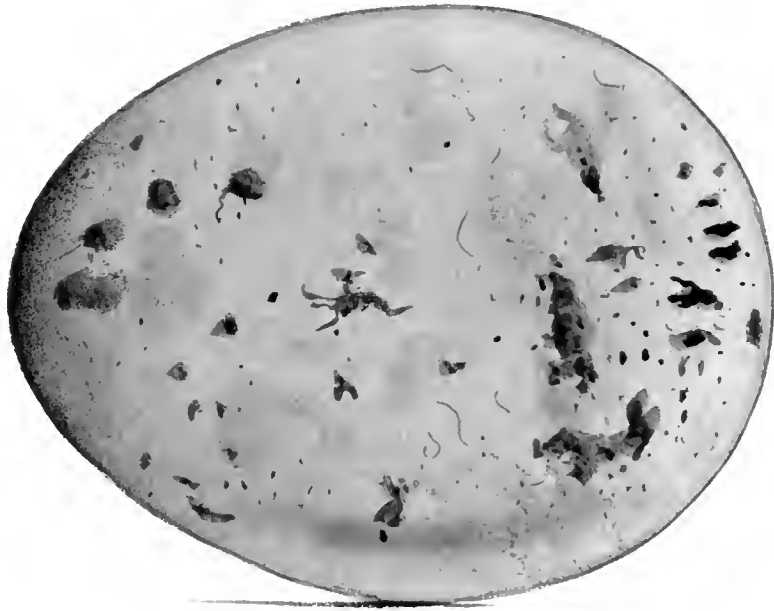
PLATE CXXVIII. FIG. II.

THE GLAUCOUS GULL, which breeds in Iceland, Spitzbergen, and many other parts of the far north, selects places for its nest similar to those chosen by the gulls with which we are familiar, sometimes making its nest upon the sea-beach, and at other times upon the ledges on the face of a precipice or at its summit. Dr. Richardson states that the Glaucous Gull is a common species in Greenland, Baffin's Bay, and the Polar Seas, where it breeds upon the precipitous rocks which form the coast. It will be seen by the egg of this species, figured in the plate, that it bears a near resemblance both in size and colouring to those of the greater black-backed gull: it was kindly lent me from his collection by Mr. John Sewell of Newcastle, who had it from Iceland.





CXXIX



*NATATORES.**LARIDÆ.*

## SKUA GULL.

BONXIE.

LESTRIS CATARRACTES.

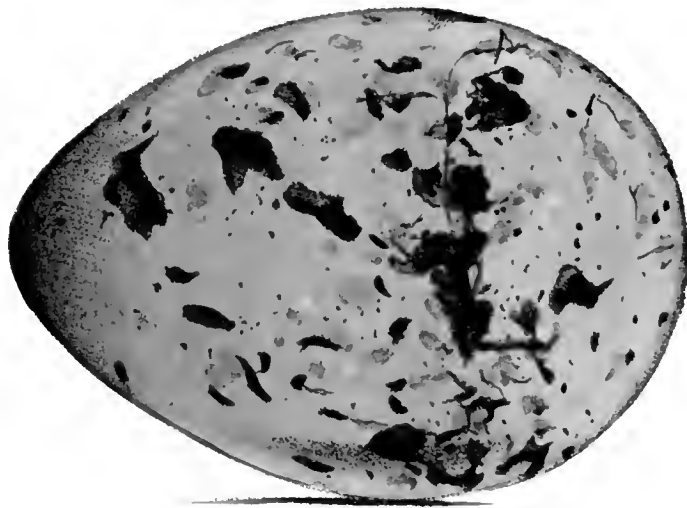
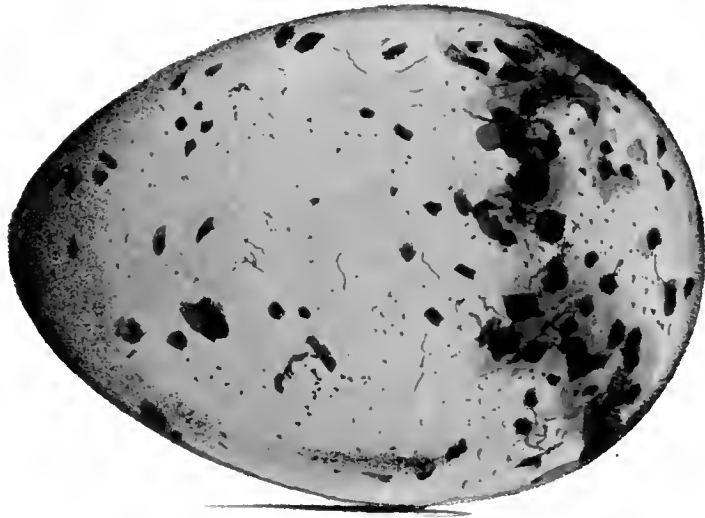
PLATE CXXIX.

S<sup>H</sup>ETLAND alone, amongst the British Islands, is the resort of these birds during the breeding-season. They are there even in small numbers, and confined to three very limited localities, to which they return yearly. On the island of Unst, the property of Mr. Edmonston, I saw only three pairs which he informed me had been the number for a length of time; here they had chosen the summit of the island, and seem particularly partial to high ground—a trait characteristic of the genus. Ronas Hill, the highest on the islands, is another place of their choice; and although here they rear their young ones on the low ground at the base of the mountain, yet they may constantly be seen soaring eagle-like over its misty top. This remote and solitary spot had been the undisturbed resort of numbers, until visited the year previous to our being there by a man of the name of Dunn, a bird-stuffer of Hull, who, devoid of the feelings of a naturalist or admiration of the birds themselves, or decent regard for those of the kind and hospitable people by whom he was entertained, and upon whose property he was allowed unrestricted liberty to roam, took up his residence at the spot, in order the more effectually to destroy those birds, which are considered by the people as their friends, and the protectors of their flocks against the eagles. In this he

found no difficulty, for the bird knows no fear, and succeeded in almost extirpating them, not more than ten or twelve remaining when we were there. Here all the eggs which we found were of the deep colouring of the first figure of the plate, whilst most of those which I afterwards saw upon Foula were lighter and more like the second: one was nearly white, bleached I should suppose, by the almost constant moisture of the mist, their breeding-place being here within a few paces of the mountain top, fourteen hundred feet in height. More labour is bestowed by the Skua in the formation of its nest than by the different species of sea gulls: it is large and composed of a quantity of the moss which grows in such moory situations. The eggs, which are always two in number, are laid towards the end of June; they are easily found, and their situation pointed out by the poor bird itself, in its anxiety to defend them. It is impossible not to admire its unflinching boldness of attack; soaring aloft, it will, on your approaching its nest, suddenly pounce down at a short distance from you to the level of your head; and, flying directly at you and with great force, will strike you with its powerful bill, immediately rising to repeat its attack, which is continued with increasing rapidity as you near its nest. It is considered by the inhabitants as the protector of their flocks, and with good reason, and it is by them protected in return. No eagle would with impunity approach the dwelling-place of a bird possessed of such courage and intrepidity. When soaring aloft, it much resembles an eagle in its flight—when on the ground, no one would suppose it the same bird which he had just before seen, in hawk-like rapidity of flight, pursuing the other seabirds to plunder them of their fish. I have seen it thus attack the solan goose. Mr. Drosier had been here before me, and, much to the regret of the inhabitants, had destroyed many of their favourites.



CXXX.



NATATORES.

LARIDÆ

## RICHARDSON'S ARCTIC GULL.

## LESTRIS RICHARDSONII.

PLATE CXXX.

THE *LESTRIS RICHARDSONII*, first characterized as a new species by Mr. Swainson, and named by him in compliment to Dr. Richardson, the arctic traveller, by whom it was brought home from the polar regions, had previously been confounded with the *Lestris parasiticus* of Linnæus, from which it is readily distinguished by its shorter tail, together with many other characters. It is the commonest species upon our coast, the true *L. parasiticus* being of rare occurrence: it breeds on several of the Orkney and Shetland Islands; on the latter, upon those of Noss, Unst, and Foula, upon each of which I have had the pleasure of seeing them in considerable numbers. Here they breed in society, as many as fifty or sixty together, and seem to prefer those districts which are low and marshy for the purposes of nidification, laying their eggs, nevertheless, upon some slight eminence of dry ground. On the contrary, amongst the very numerous small islands on the coast of Norway, they breed most commonly apart from each other, each pair taking possession of its separate island, upon the highest point of nearly all of which they are constantly to be seen perched, and upon it they usually lay their eggs. They are the merciless persecutors of the other species of sea-birds in their neighbourhood, sucking their eggs whenever they are left uncovered by

their owners, and with unavoidable speed of wing pursuing them over the surrounding sea, in order to compel them to disgorge those fish which they have just captured for themselves and their young ones. They are the hawks amongst the feathered inhabitants of the ocean, fearlessly attacking even the greater black-backed gull, and evincing in their amazingly rapid evolutions of flight, when in pursuit of each other, a rapidity of wing which I have never seen surpassed. Upon some of the larger islands, where we observed two or more pairs, they were quite distinct, occupying each its own particular spot.

There is something unaccountable in the variation of plumage of the *L. Richardsonii*, no other species with which we are acquainted assuming, as it does, in different individuals at the same time, and in both sexes, and when breeding, and consequently in a state of maturity, two distinct variations of plumage—some being of the deep uniform brown, as in the figure of the Fauna Boreali-Americana, others with all the under parts white, or nearly so. Those of the lighter variety are, I should suppose, the more adult birds; they are larger, as noticed by Dr. Edmonston; this may, however, be accounted for by their being much more frequently females than males, the many specimens which Mr. J. Hancock dissected whilst in Norway being of that sex. I doubt not, however, that the male is subject, though very rarely, to the same change of plumage, not having more than twice met with the light-coloured birds in pairs, although I have in hundreds of instances seen a dark and light one together, as well as two dark ones. It is a curious fact that whilst on the Shetland Islands the light variety is much less numerous than the other, not bearing a proportion of more than one in six or seven: in Norway they are nearly equal. You are made aware of your approach to their breeding-places long before you reach them, by the loud, harsh, singu-

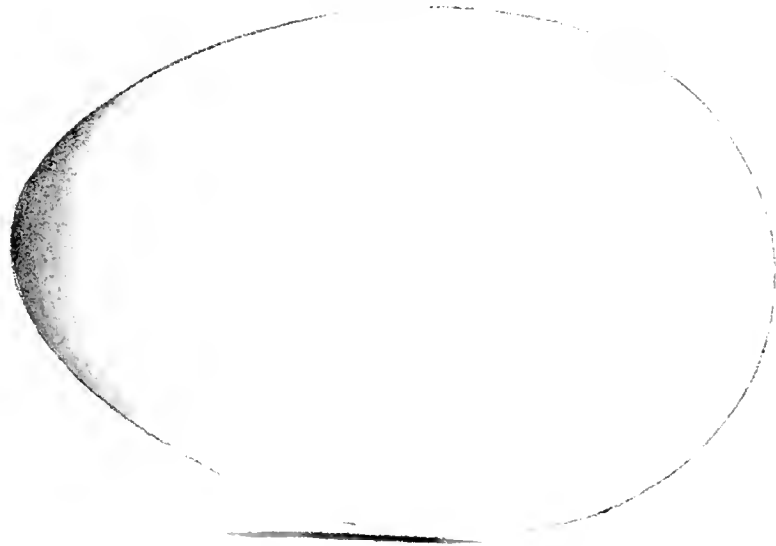
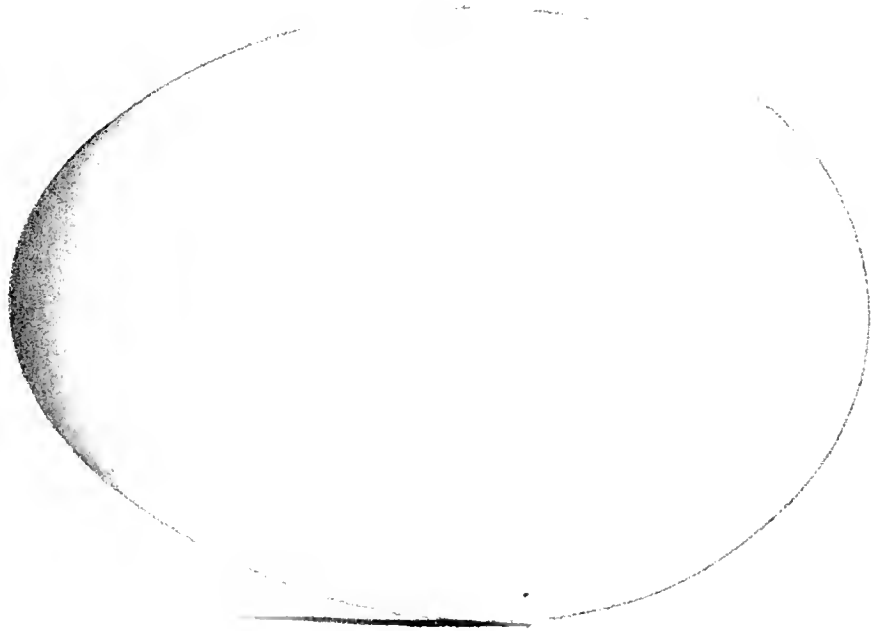


lar cry of this species, more nearly resembling that of a cat than of a bird. Nothing can exceed their solicitude as you near their eggs;—seating themselves at a short distance, they flutter about and creep along the ground, extending their wings, and expressing, with a language as intelligible as words, their anxiety. The nest is merely an impression in the heath, grass, or moss, upon which they lay their eggs, their places of breeding being uncultivated moory wastes. The eggs are always two in number; and though they differ considerably, are readily known from those of any other bird, except the whimbrel, some eggs of which they sometimes greatly resemble. The *L. Richardsonii* begins to breed early in June.





CXXXI



NATATORES.

LARIDÆ.

## FULMAR PETREL.

PROCELLARIA GLACIALIS.

PLATE CXXXI. FIG. I.

THE FULMAR PETREL is a very local bird during the breeding-season, being then confined in this country to three or four places only, and these all near together. Mr. Atkinson met with them in great numbers on the islands of St. Kilda, Borrera, and Soa, and was informed that they breed in the south isles of Barra, in the Outer Hebrides. They make little or no nest, but lay their single white egg upon ledges of the rock, much in the same manner as the kittiwake, but differing from it in always selecting those rocks which are covered with grass, whilst the kittiwake makes its nest upon the bare stone. The Fulmar Petrels begin to lay their eggs during the first week of June, which, as well as the birds themselves, are taken in great numbers by the inhabitants for food—the sea birds and their eggs forming their almost only means of subsistence.

The egg of the Fulmar is remarkably large, and equals in size those of the skua and herring gulls, and is about twice as large as those of the kittiwake, whilst the birds themselves are nearly of the same size. The eggs of the birds of this genus are always very easily identified from those of all other species by a strong musky smell, which they retain for a length of time.

*NATATORES.**LARIDÆ.*

## SHEARWATER PETREL.

MANX PETREL.

PROCELLARIA ANGLORUM.

PLATE CXXXI. FIG. II.

LIKE the rest of the petrels, these birds are seldom seen on wing. They breed in small numbers on the Western Islands, upon St. Kilda and the adjoining rocks, in Orkney, Shetland, and upon Annet, an island of the Seilly group off the coast of Cornwall. Though constantly on the watch during my stay in Shetland, I only once saw this bird at large, and suppose that it must feed principally during the night, like the stormy petrel.

They breed in the most wild and inaccessible rocks which bound these lonely islands, in holes, much in the same manner as the puffin, but are more careful in their selection, and make use of those only which, being overgrown at the mouth with tufts of grass, are more difficult to discover. They make a slight nest of dry plants, usually about the depth of a man's arm from the entrance of the hole, although sometimes a good deal beyond his reach. They lay one egg only, so like those of our domestic fowl, that, were it not for the beautiful texture of the shell, and the musky smell,—which is, however, less in the eggs of this species than in those of the fulmar and stormy petrels—it would be very difficult to distinguish them.

The young of this bird are held in such high estimation by the fishermen as food, for which they are annually taken, that

I had great difficulty in obtaining the eggs, and not till I had offered a bribe could I prevail upon them to discover to me the places of resort of the Shearwater, which are known only to a few of the best and most daring climbers. Dr. Edmonston of Shetland, told me, that a knowledge of these nesting-places is kept as a family secret, and handed down from sire to son.

The Shearwater Petrel seems to be very irregular in its time of breeding. The fishermen told me, in the beginning of June, that it would be quite useless to attempt seeking their eggs, and that they would not begin to lay for some weeks. Of those that were brought me on the fifth of June, some were quite fresh, whilst others had live young ones in them ; the same thing occurred on the nineteenth of the same month. On the Island of Annet, these birds rear their young ones in burrows amongst the soft sandy soil, and lay their eggs either upon the ground or upon some pieces of fern, by which the island is overgrown.

*NATATORES.**LARIDÆ.*

## STORMY PETREL.

MOTHER CARY'S CHICKEN.

THALASSIDROMA PELAGICA.

PLATE CXXXI. FIG. III.

IN an excursion through the Shetland Islands during the summer in search of rarities for my late work, I had the very great satisfaction of seeing and taking many of these most interesting birds alive. They breed in great numbers on many of the islands, principally upon Foula, the north of Unst, and upon Papa and Oxna, two small islands in the Bay of Scalloway. The last of these I visited on the 31st of May, in hopes that I should procure their eggs, it being the season during which most of the sea-birds begin to lay; but in this I was disappointed; the fishermen, who know the Petrels well by the name of swallows, assured me that my search would be quite useless, that they had not yet "come up from the sea," and so it proved. Sixteen days after this, June the 16th, and three following days, I was at Foula, but was alike unsuccessful; the birds had arrived at their breeding-places, but had not yet begun to lay their eggs. Numbers of them were sitting in their holes, and were easily caught; one man brought me above a dozen tied up in an old stocking, two of which I kept alive in my room for nearly three days, and derived very great pleasure from their company. During the day they were mostly inactive; and, after pacing about the floor for a short time, poking their heads into every hole, they hid



themselves between the feet of the table and the wall. I could not prevail upon them to eat anything, though I tried to tempt them with fish and oil. Their manner of walking is very light and pleasing, and differs from that of every other bird which I have seen ; they carry their bodies so far forward, and so nearly horizontal, as to give them the appearance of being out of equilibrium. In the evening, towards sunset, they would leave their hiding-places, and for hours afterwards never ceased in their endeavours to regain their liberty, flying round and round the room, or fluttering against the windows. When flying, their length of wing and the white above the tail gives them a good deal the appearance of our house-martin. The last night that they were with me, I went to bed and watched them in their noiseless flight long ere I fell asleep ; but in the morning they had disappeared. One had fortunately made its escape through a broken pane in the window, which a towel should have stopped up ; the other had fallen into a basin full of the contents of the eggs which I had been blowing, and was drowned. I regretted much the fate of a being, rendered so interesting by its very remarkable wandering, solitary, harmless life. Before leaving Shetland, I again visited the island of Oxna ; and, though so late as the 30th of June, the Petrels were only just beginning to lay their eggs. In Foula, they breed in holes in the cliff, a great height above the sea ; but here under stones, which form the beach at a depth of three or four feet or more, according to that of the stones, since they go down to the earth beneath them, on which to lay their eggs. In walking over the surface I could hear them under my feet, very distinctly singing in a sort of warbling chatter, a good deal like swallows when fluttering above our chimney-tops, but somewhat harsher ; and by listening attentively, was guided to their retreat, and after throwing out stones as large as I could lift, on all sides of me, seldom failed in finding

two or three of them, seated on their nests either under the lowest stone, or between two of them. The nests, though of much the same materials as the ground on which they were placed, seemed to have been made with care: they were of small bits of stalks of plants, and pieces of hard dry earth. Like the rest of the genus the Stormy Petrel lays invariably one egg only. During the day-time, the Petrels remain within their holes; and though the fishermen are constantly passing over their heads,—the beach under which they breed, being appropriated to the drying of fish,—they are then seldom heard, but towards night become extremely garrulous; and when most other birds are gone to rest, issue forth, spreading themselves far over the surface of the sea: the fishermen then meet with them in great numbers, and though they had not previously seen one, are sure to be surrounded by them upon throwing pieces of fish overboard. This is very opposite to Wilson's opinion, who says, that "they return to feed their young only during the night; in the day they are silent and wander widely over the ocean." The males may possibly be abroad during the day, whilst the females are sitting; but I am inclined to think that they rarely come out before night, as the fishermen never see them at any other time.

# INDEX.

	PLATE	PAGE		PLATE	PAGE
Accentor alpinus . . . . .	xxi.	69	Aquila chrysaetos . . . . .	. ii.	3
„ modularis . . . . .	xxi.	70	Arctic Tern . . . . .	cxx.	428
Accipiter nisus . . . . .	vii.	22	Ardeidæ . . . . .		269
Alaudidæ . . . . .		137	Ardea alba . . . . .	LXXV.	274
Alauda arborea . . . . .	xxxvii.	139	„ cinerea . . . . .	LXXIV.	269
„ arvensis . . . . .	xxxvii.	137	„ garzetta . . . . .	LXXV.	276
„ brachydactyla . . . . .	xxxvii.*	140*	„ nycticorax . . . . .	LXXIV.	272
Alcedæ . . . . .		399	„ purpurea . . . . .	LXXIV.	271
Alca torda . . . . .	cxiv.	411	Astur palumbarius . . . . .	vii.	21
„ impennis . . . . .	cxv.	413	Avocet . . . . .	LXXXII.	297
Alcedo ispida . . . . .	Lvi.	211			
Alpine accentor . . . . .	xxi.	69	Baillons Crake . . . . .	xc.	321
Alpine swift . . . . .	Lviii.	222	Barnacle Goose . . . . .	xciv.	336
American Cuckoo . . . . .	LV.	207	Barn Owl . . . . .	xiv.	37
Anatidæ . . . . .		331	Bass Goose . . . . .	cxvi.	418
Anas acuta . . . . .	xcviii.	351	Bean Goose . . . . .	xciii.	331
„ boschas . . . . .	xcviii.	352	Bearded Titmouse . . . . .	xxxii.	122
„ crecca . . . . .	xcix.	356	Bee-eater . . . . .	Lvi.	210
„ clypeata . . . . .	xcvii.	347	Bewicks Swan . . . . .	xcvi.	344
„ querquedula . . . . .	xcix.	355	Billy-biter . . . . .	xxxi.	112
„ strepera . . . . .	xcvii.	349	Bittern . . . . .	LXXVI.	278
„ Penelope . . . . .	xcix.	358	Blackbird . . . . .	xix	63
Anser albifrons . . . . .	xciv.	335	Black Redstart . . . . .	xxiii.	78
„ brachyrhynchus . . . . .	xciii.	333	Black Cap . . . . .	xxvii.	93
„ brenta . . . . .	xciv.	337	Black Cap . . . . .	xxxix.	144
„ Canadensis . . . . .	xcv.	340	Black-headed Bunting . . . . .	xxxix.	144
„ Egyptiacus . . . . .	xcv.	339	Black Neb . . . . .	XLIX.	179
„ ferus . . . . .	xciii.	331	Black Martin . . . . .	Lviii.	221
„ leucopsis . . . . .	xciv.	336	Black Grouse . . . . .	Lxii.	234
„ segetum . . . . .	xciii.	331	Black Stork . . . . .	LXXVII.	281
Anthidæ . . . . .		131	Black-winged Stilt . . . . .	LXXXII.	298
Anthus arboreus . . . . .	xxxv.	131	Black-tailed Godwit . . . . .	LXXXIII.	299
„ aquaticus . . . . .	xxxvi.	134	Black-throated Diver . . . . .	cviii.	395
„ pratensis . . . . .	xxxvi.	133	Black Guillemot . . . . .	cxii.	405
„ Ricardi . . . . .	xxxvi.	135	Black Tern . . . . .	cxxii.	435
Aquila albicilla . . . . .	ii.	6	Black-headed Gull . . . . .	cxxiii.	437

	PLATE	PAGE
Blue-throated Warbler	.xxiii.	75
Blue Titmouse . . .	.xxxi.	112
Blue Cap . . .	.xxxi.	112
Bonxie . . .	.cxxix.	451
Botaurus minutus . .	.Lxxvi.	277
„ stellaris . . .	.Lxxvi.	278
Bottle Tit . . .	.xxxii.	120
Brambling . . .	.xli.	151
Brent Goose . . .	.xciv.	337
Broad-billed Sandpiper	.Lxxxvii.	311
Brown Linnet . . .	.xlv.	165
Brunnich's Guillemot .	.cxi.	403
Bubo maximus . . .	.xii.	33
Bullfinch . . .	.xlvi.	169
Bunting Lark . . .	.xxxix.	143
Butcher-bird . . .	.xv.	44
Buteo vulgaris . . .	.ix.	25
„ lagopus . . .	.ix.	26
Calamophilus biarmicus	.xxxii.	122
Capercaillie . . .	.lxii.	233
Caprimulgidae . . .		223
Caprimulgus Europeus .	.lix.	223
Canada Goose . . .	.xcv.	340
Carduelis elegans . .	.xliv.	161
„ spinus . . .	.xliv.	163
Carr Swallow . . .	.cxxii.	435
Carriion Crow . . .	.xlix.	179
Caspian Tern . . .	.cxvii.	421
Certhiidae . . .		198
Certhia familiaris . .	.liii.	198
Chaffinch . . .	.xli.	149
„ aradriidae . . .		249
„ aradrius Cantianus .	.Lxix.	257
„ hyaticula . . .	.Lxix.	255
„ minor . . .	.Lxix.	258
„ morinellus . . .	.Lxviii.	251
„ pluvialis . . .	.Lxviii.	249
Cliff-chaff . . .	.xxviii.	103
Chough . . .	.xlvi.	174
Ciconia alba . . .	.Lxxvii.	279
„ nigra . . .	.Lxxvii.	281
Cinclus aquaticus . .	.xvii.	53
Circus cineraceus . .	.xi.	32
„ cyaneus . . .	.xi.	31
„ rufus . . .	.xi.	29

	PLATE	PAGE
Cirl Bunting . . .	.xl.	147
Coccothraustes chloris	.xliii.	157
„ vulgaris . . .	.xliii.	158
Coccyzus Americanus .	.lv.	207
Cock of the Woods . .	.lxii.	233
Cole Titmouse . . .	.xxxii.	117
Columba ænas . . .	.lx.	227
„ livia . . .	.lx.	228
„ palumbus . . .	.lx.	225
„ turtur . . .	.lx.	229
Columbidae . . .		225
Colymbidae . . .		385
Colymbus arcticus . .	.cviii.	395
„ glacialis . . .	.cvii.	393
„ septentrionalis . .	.cviii.	397
Common Buzzard . . .	.ix.	25
Common Dipper . . .	.xvii.	53
Common Bunting . . .	.xxxix.	143
Common Linnet . . .	.xlv.	165
Common Sandpiper . .	.Lxxxii.	293
Common Snipe . . .	.Lxxxvi.	307
Common Tern . . .	.cxx.	427
Common Guillemot . .	.cix.	399
Common Gull . . .	.cxxxv.	441
Conirostres . . .		137
Coot . . .	.xci.	327
Coracias garrula . . .	.lvi.	209
Corbie Crow . . .	.xlix.	179
Corn Bunting . . .	.xxxix.	143
Corncrake . . .	.Lxxxix.	317
Cormorant . . .	.cxvi.	415
Corvidæ . . .		174
Corvus corax . . .	.xlvi.	177
„ cornix . . .	.xlix.	181
„ corone . . .	.xlix.	179
„ frugilegus . . .	.l.	183
„ monedula . . .	.l.	188
Coturnix vulgaris . .	.Lxv.	243
Coulterneb . . .	.cxiii.	408
Crane . . .	.Lxxiii.	267
Crested Titmouse . . .	.xxxii.	115
Crex Baillonii . . .	.xc.	321
Crex porzana . . .	.Lxxxix.	318
„ pratensis . . .	.Lxxxix.	317
Creepers . . .	.liii.	198
Crossbill . . .	.xlvi.	170

	PLATE	PAGE		PLATE	PAGE
Cuculidæ . . . . .		205	Fire-crested Wren . . . . .	xxx.	109
Cuculus canorus . . . . .	lv.	205	Fishing Hawk . . . . .	iii.	9
Cuckoo . . . . .	lv.	205	Fissirostres . . . . .		209
Curlew . . . . .	lxxix.	285	Foolish Guillemot . . . . .	cix.	399
Curruca atricapilla . . . . .	xxvii.	93	Fratercula arctica . . . . .	cxiii.	408
„ cinerea . . . . .	xxvii.	96	Eregilus graculus . . . . .	xlvi.	174
„ hortensis . . . . .	xxvii.	95	French Partridge . . . . .	lxiv.	238
„ sylviella . . . . .	xxvii.	98	Fringillidæ . . . . .		149
Cushat . . . . .	lx.	225	Fringilla cœlebs . . . . .	xli.	149
Cygnus Bewickii . . . . .	xcvi.	344	„ montifringilla . . . . .	xli.	151
„ ferus . . . . .	xcvi.	343	Fulica atra . . . . .	xc.	327
Cypselus alpinus . . . . .	lviii.	222	Fuligula ferina . . . . .	cii.	371
„ murarius . . . . .	lviii.	221	„ cristata . . . . .	cii.	374
			„ glacialis . . . . .	ciii.	375
Dabchick . . . . .	cvi.	291	„ histrionica . . . . .	ciii.	376
Dartford Warbler . . . . .	xxix.	105	„ marila . . . . .	cii.	373
Dentirostres . . . . .		43	„ nyroca . . . . .	ci.*	368*
Deviling . . . . .	lviii.	221	„ vulgaris . . . . .	ciii.	378
Dotterel . . . . .	lxviii.	251	Fulmar Petrel . . . . .	cxxxi.	457
Double Snipe . . . . .	lxxxvi.	305			
Dunlin . . . . .	lxxxviii.	313	Gadwall . . . . .	xcvii.	349
			Gallinula chloropus . . . . .	xc.	325
Eagle Owl . . . . .	xii.	33	Gannet . . . . .	cxvi.	418
Eared Grebe . . . . .	cvi.	390	Garden Warbler . . . . .	xxvii.	95
Egyptian Goose . . . . .	xcv.	339	Garganey . . . . .	xcix.	355
Egyptian Vulture . . . . .	i.	1	Garrulus glandarius . . . . .	li.	192
Eider Duck . . . . .	c.	361	Glaucous Gull . . . . .	cxxviii.	450
Emberizidæ . . . . .		141	Glareola torquata . . . . .	lxvii.*	247*
Emberiza cirrus . . . . .	xl.	147	Glossy Ibis . . . . .	lxxxviii.*	283*
„ citrinella . . . . .	xxxix.	145	Golden Eagle . . . . .	ii.	3
„ hortulana . . . . .	xl.	148	Golden Oriole . . . . .	xx.	67
„ miliaria . . . . .	xxxix.	143	Golden-crested Wren . . . . .	xxx.	10
„ schoeniclus . . . . .	xxxix.	144	Gold Spink . . . . .	xxxix.	14
Erythaca rubecula . . . . .	xxii.	71	Goldfinch . . . . .	xliv.	161
			Golden Plover . . . . .	lxviii.	249
Falconidæ . . . . .		3	Golden-eye . . . . .	ciii.	378
Falco æsalon . . . . .	v.	17	Goosander . . . . .	civ.	382
„ Islandicus . . . . .	iii.	11	Goshawk . . . . .	vii.	21
„ peregrinus . . . . .	iv.	13	Grasschat . . . . .	xxiv.	80
„ subbuteo . . . . .	v.	15	Grasshopper Warbler . . . . .	xxv.	85
„ tinnunculus . . . . .	vi.	19	Grallatores . . . . .		249
Fern Owl . . . . .	lix.	223	Great Grey Shrike . . . . .	xv.	43
Ferruginous Duck . . . . .	ci.*	368*	Great Titmouse . . . . .	xxxi.	111
Fieldfare . . . . .	xviii.	57	Great Black Woodpecker . . . . .	lii.	193
Firetail . . . . .	xxiii.	77	Great Spotted Woodpecker . . . . .	lii.	195
			Great Bustard . . . . .	lxvi.	245

	PLATE	PAGE		PLATE	PAGE
Great White Heron .	LXXV.	274	House Sparrow	. xlii.	155
Great Egret . . .	LXXV.	274	Ibis falcinellus .	LXXviii.*	283*
Great Snipe . . .	LXXXvi.	305	Iceland Falcon . . .	iii.	11
Great-crested Grebe .	cv.	385	Insessores . . . .		43
Great Auk . . . .	cxv.	413	Jackdaw . . . .	L.	188
Great Northern Diver .	cvii.	393	Jack Snipe . . . .	LXXXvi.	309
Greater Black-backed			Jay . . . . .	li.	192
Gull . . . . .	cxxviii.	447	Judcock . . . . .	LXXXvi.	309
Green Linnet . . .	xlili.	157	Kentish Plover . .	LXix.	257
Greenfinch . . . .	xlili.	157	Kestrel . . . . .	vi.	19
Green Grosbeak . . .	xlili.	157	King Duck . . . .	c.	364
Green Woodpecker . .	lii.	194	Kingfisher . . . .	Lvi.	211
Green Plover . . . .	LXX.	261	Kite . . . . .	viii.	23
Green Cormorant . .	cxvi.	417	Kitty Wren . . . .	liii.	199
Grey Wagtail . . . .	xxxiii.	il26	Kittiwake . . . .	cxxiv.	439
Grey-headed Yellow Wag-			Landrail . . . . .	LXXXix.	317
tail . . . . .	xxxiv.	127	Laniadæ . . . . .		43
Grey Linnet . . . .	xlv.	615	Lanius excubitor . .	xv.	43
Grey Phalarope . . .	xcii.	329	„ collurio . . . .	xv.	44
Grey-lag Goose . . .	xciii.	331	„ rufus . . . . .	xv.	46
Gruidæ . . . . .		267	Lapwing . . . . .	LXX.	261
Grus cinerea . . . .	Lxxiii.	267	Laridæ . . . . .		421
Gull-billed Tern . .	cxxi.	431	Larus argentatus .	cxxvii.	445
Guernsey Partridge .	Lxiv.	238	„ canus . . . . .	cxxv.	441
Halcionidæ . . . . .		211	„ fuscus . . . . .	cxxvi.	443
Harlequin Duck . . .	ciii.	376	„ glaucus . . . .	cxxviii.	450
Hawfinch . . . . .	xlili.	158	„ marinus . . . .	cxxviii.	447
Hedge Accentor . . .	xxi.	70	„ ridibundus . . .	cxxiii.	437
Hedge Sparrow . . . .	xxi.	70	„ tridactylus . .	cxxiv.	439
Heron . . . . .	Lxxiv.	269	Lesser Whitethroat	xxvii.	98
Hæmatopus ostralegus	Lxxii.	265	Lesser Redpole . . .	xlv.	166
Herring Gull . . . .	cxxvii.	445	Lesser Spotted Woodpecker	lii.	196
Hen Harrier . . . . .	xi.	31	Lesser Tern . . . .	cxxi.	432
Himantopus melanopterus			Lesser Black-backed Gull	cxxvi.	443
	Lxxxii.	298	Lestris catarractes .	cxxix.	451
Hirundinidæ . . . . .		213	„ Richardsonii	cxxx.	453
Hirundo riparia . . .	lvii.	218	Limosa melanura	Lxxxiii.	299
rustica . . . . .	lvii.	213	Linota cannabina . .	xlv.	165
„ urbica . . . . .	lvi.	216	„ linaria . . . . .	xlv.	166
Hobby . . . . .	v.	15	„ montium . . . .	xlv.	167
Honey Buzzard . . . .	x.	27	Little Grebe . . . .	cvi.	391
Hooded Crow . . . .	xl ix.	181	„ Auk . . . . .	cxiii.	407
Hoopoe . . . . .	liv.	201	„ Owl . . . . .	xiii.	40
Horned Grebe . . . .	cvi.	389			
House Martin . . . .	lvii.	216			

	PLATE	PAGE
Little Bustard . . .	LXvi.	246
„ Ring Plover . . .	LXix.	258
„ Egret . . .	LXXv.	276
„ Bittern . . .	LXXvi.	277
Lobipedidæ . . .		327
Long-eared Owl . . .	xiv.	35
Long-tailed Titmouse . . .	xxxii.	120
Long-legged Plover . . .	LXXXii.	298
Long-tailed Duck . . .	ciii.	375
Loon . . .	cv.	385
Loxia curvirostra . . .	XLvi.	170
Machetes pugnax . . .	LXXXiv.	301
Magpie . . .	Li.	189
Manx Petrel . . .	cxxxi.	458
Marsh Harrier . . .	xi.	29
Marsh Titmouse . . .	xxxii.	119
Martin . . .	Lvii.	216
Meadow Pipit . . .	xxxvi.	133
Melizophilus provincialis . . .	xxix.	105
Merlin . . .	v.	17
Mergus merganser . . .	civ.	382
„ serrator . . .	civ.	381
Mergulus melanoleucos . . .	cxiii.	407
Meropidæ . . .		209
Merops apiaster . . .	Lvi.	210
Merulidæ . . .		53
Milvus vulgaris . . .	viii.	23
Missel Thrush . . .	xvii.	55
Montagu's Harrier . . .	xi.	32
Moor Buzzard . . .	xi.	29
Moor-hen . . .	xc.	325
Motacillidæ . . .		125
Motacilla boarula . . .	xxxiii.	126
„ flava . . .	xxxiv.	127
„ Rayi . . .	xxxiv.	129
„ Yarrellii . . .	xxxiii.	125
Mother Cary's Chicken . . .	cxxxi.	460
Mountain Finch . . .	XLi.	151
Mountain Linnet . . .	XLv.	167
Muscicapidæ . . .		49
Muscicapa atricapilla . . .	xvi.	50
„ grisola . . .	xvi.	49
Natatores . . .		331
Nightingale . . .	xxvi.	91

	PLATE	PAGE
Night-jar . . .	Lix.	223
Night Hawk . . .	Lix.	223
Night Heron . . .	LXXiv.	272
Noctua passerina . . .	xiii.	40
„ Tengmalmi . . .	xiii.	41
Norfolk Plover . . .	LXvii.	247
Numenius arquata . . .	LXXix.	285
„ phæopus . . .	XXXix.	287
Nuthatch . . .	Liv.	203
Oedienemus crepitans . . .	LXvii.	247
Oidemia fusca . . .	ci.	365
„ nigra . . .	ci.	367
„ perspicillata . . .	ci.	368
Oriolus galbula . . .	xx.	67
Ortolan Bunting . . .	XL.	148
Ortyx Virginiana . . .	LXv.	241
Osprey . . .	iii.	9
Otis tarda . . .	LXvi.	245
„ tetrax . . .	LXvi.	246
Otus brachyotos . . .	xiv.	36
„ vulgaris . . .	xiv.	35
Ox-eye . . .	xxxi.	111
Oyster-catcher . . .	LXXii.	265
Pandion haliaëtus . . .	iii.	9
Paridæ . . .		111
Parus ater . . .	xxxi.	117
„ cæruleus . . .	xxxi.	112
„ cristatus . . .	xxxi.	115
„ candatus . . .	xxxii.	120
„ major . . .	xxxi.	111
„ palustris . . .	xxxii.	119
Partridge . . .	Lxiv.	237
Passer domesticus . . .	XLii.	155
„ montanus . . .	XLii.	153
Peewit . . .	LXX.	261
Pelecanidæ . . .		415
Perdix cinerea . . .	Lxiv.	237
„ rufa . . .	Lxiv.	238
Peregrine Falcon . . .	iv.	13
Pernis apivorus . . .	x.	27
Phalacrocorax carbo . . .	cxvi.	415
„ cristatus . . .	cxvi.	417
Phalaropus lobatus . . .	xcii.	329
„ hyperboreus . . .	xcii.	330

	PLATE	PAGE		PLATE	PAGE
Phasianidæ . . . . .		231	Recurvirostra avocetta	LXXXii.	297
Phasianus colchicus . . . . .	Lxi.	231	Red-backed Shrike . . . . .	xv.	44
Pheasant . . . . .	Lxi.	231	Redwing . . . . .	xix.	61
Phænicura ruticilla . . . . .	xxiii.	77	Redstart . . . . .	xxiii.	77
„ suecica . . . . .	xxiii.	75	Redtail . . . . .	xxiii.	77
„ tithys . . . . .	xxiii.	78	Red Grouse . . . . .	Lxiii.	235
Philomela lusciniæ . . . . .	xxvi.	91	Red-legged Partridge . . . . .	Lxiv.	238
Pianet . . . . .	Li.	189	Red-shank . . . . .	LXXX.	289
Pica caudata . . . . .	Li.	189	Red-necked Phalarope . . . . .	xcii.	330
Picidæ . . . . .		193	Red-breasted Merganser . . . . .	civ.	381
Picus martius . . . . .	Lii.	193	Red-necked Grebe . . . . .	cv.	387
„ major . . . . .	Lii.	195	Red-throated Diver . . . . .	cviii.	397
„ minor . . . . .	Lii.	196	Red-legged Crow . . . . .	XLvii.	174
„ viridis . . . . .	Lii.	194	Reed Warbler . . . . .	xxv.	88
Pick-a-tree . . . . .	XLi.	149	Reed Sparrow . . . . .	xxxix.	144
Pied Fly-catcher . . . . .	xvi.	50	Reeve . . . . .	LXXXiv.	301
Pied Wagtail . . . . .	xxxiii.	125	Regulus auricapillus . . . . .	xxx.	107
Pink-footed Goose . . . . .	xciii.	333	„ ignicapillus . . . . .	xxx.	109
Pintail Duck . . . . .	xcviii.	351	Richard's Pipit . . . . .	xxxvi.	135
Platalea leucorodia . . . . .	LXXviii.	283	Richardson's Arctic Gull . . . . .	cxxx.	453
Plectrophanes nivalis . . . . .	xxxviii.	141	Ring Ouzel . . . . .	xix.	65
Pochard . . . . .	cii.	371	Ring Dove . . . . .	Lx.	225
Podiceps auritus . . . . .	cvi.	390	Ring Plover . . . . .	Lxix.	255
„ cristatus . . . . .	cv.	385	Ring Dotterel . . . . .	Lxix.	255
„ cornutus . . . . .	cvi.	389	Robin Redbreast . . . . .	xxii.	71
„ minor . . . . .	cvi.	391	Rock Pipit . . . . .	xxxvi.	143
„ rubricollis . . . . .	cv.	387	Rock Lark . . . . .	xxxvi.	134
Pratincole . . . . .	LXvii.*	247*	Rock Dove . . . . .	Lx.	228
Procellaria Anglorum . . . . .	cxxxi.	458	Roller . . . . .	Lvi.	209
„ glacialis . . . . .	cxxxi.	457	Rook . . . . .	L.	183
Ptarmigan . . . . .	Lxiii.	236	Roseate Tern . . . . .	cxix.	425
Puffin . . . . .	cxiii.	840	Rough-legged Buzzard . . . . .	ix.	26
Purple Sandpiper . . . . .	LXXXviii.	315	Royston Crow . . . . .	XLix.	181
Purple Heron . . . . .	LXXiv.	271	Ruff . . . . .	LXXXiv.	301
Pyrrhula vulgaris . . . . .	XLvi.	169			
Quail . . . . .	LXv.	243	Salicaria arundinacea . . . . .	xxv.	88
			„ locustella . . . . .	xxv.	85
Rain-pie . . . . .	Lii.	194	„ phragmitis . . . . .	xxv.	87
Rallidæ . . . . .		317	„ luscinioides . . . . .	xxv.*	89*
Rallus aquaticus . . . . .	xc.	322	Sand-martin . . . . .	Lvii.	218
Raptores . . . . .		1	Sand-lark . . . . .	Lxix.	255
Rasores . . . . .		225	Sand-lark . . . . .	LXXXi.	293
Raven . . . . .	XLviii.	177	Sandwich Tern . . . . .	cxviii.	423
Rays Wagtail . . . . .	xxxiv.	129	Savis Warbler . . . . .	xxv.*	89*
Razor-bill . . . . .	cxiv.	411	Saxicola cenanthe . . . . .	xxiv.	82
			„ rubetra . . . . .	xxiv.	80



	PLATE	PAGE		PLATE	PAGE
Saxicola rubicola . . . . .	xxiv.	79	Sterna arctica . . . . .	cxx.	428
Scaup Duck . . . . .	cii.	373	„ Caspia . . . . .	cxvii.	421
Scausores . . . . .		193	„ cantiaca . . . . .	cxviii.	423
Selavonian Grebe . . . . .	cvi.	389	„ Dougallii . . . . .	cxix.	425
Scolopacidae . . . . .		285	„ hirundo . . . . .	cxx.	427
Scolopax gallinago . . . . .	Lxxxvi.	307	„ leucopareia . . . . .	cxx.*	430*
„ gallinula . . . . .	Lxxxvi.	309	„ minuta . . . . .	cxxi.	432
„ major . . . . .	Lxxxvi.	305	„ nigra . . . . .	cxxii.	435
„ rusticola . . . . .	Lxxxv.	303	Stonechat . . . . .	xxiv.	79
Scops-eared Owl . . . . .	xii.	34	Stone Curlew . . . . .	Lxvii.	247
Scops Aldrovandi . . . . .	xii.	34	Stock Dove . . . . .	Lx.	227
Scoter . . . . .	ci.	367	Stormy Petrel . . . . .	cxxx.	460
Screech Owl . . . . .	xiv.	37	Stork . . . . .	Lxxvii.	279
Screech . . . . .	Lviii.	221	Strigidae . . . . .		33
Sea Parrot . . . . .	cxiii.	408	Strix flammea . . . . .	xiv.	37
Sea Pie . . . . .	Lxxii.	265	Strepsilas interpres . . . . .	Lxxi.	263
Sea Swallow . . . . .	cxx.	427	Struthionidae . . . . .		245
Sedge Warbler . . . . .	xxv.	87	St. Cuthbert's Duck . . . . .	c.	361
Shag . . . . .	cxvi.	417	Sturnidae . . . . .		173
Shearwater Petrel . . . . .	cxxxi.	453	Sturnus vulgaris . . . . .	xlvii.	173
Shell-apple . . . . .	xli.	149	Sula Bassana . . . . .	cxvi.	418
Shelder . . . . .	Lxxii.	265	Surnia nyctea . . . . .	xii.*	38*
Shieldrake . . . . .	xvii.	345	Surf Scoter . . . . .	ci.	368
Short-eared Owl . . . . .	xiv.	63	Swan . . . . .	xcvi.	343
Shor-toed Lark . . . . .	xxxvii.*	140*	Swallow . . . . .	lvii.	213
Shoveler . . . . .	xvii.	347	Swift . . . . .	lviii.	221
Siskin . . . . .	xliv.	163	Sylviadæ . . . . .		69
Sitta Europæa . . . . .	liv.	203	Sylvia hippolais . . . . .	xxviii.	103
Skelly . . . . .	xli.	149	„ sibillatrix . . . . .	xxviii.	99
Skua Gull . . . . .	cxxix.	451	„ trochilus . . . . .	xxviii.	101
Sky-lark . . . . .	xxxvii.	137	Syrnium stridula . . . . .	xiii.	39
Snow Bunting . . . . .	xxxviii.	141			
Snow-flake . . . . .	xxxviii.	141	Tarrock . . . . .	cix.	399
Snowy Owl . . . . .	xii.*	38*	Tawny Owl . . . . .	xiii.	39
Somateria mollissima . . . . .	c.	316	Tawny Bunting . . . . .	xxxviii.	141
Somateria spectabilis . . . . .	c.	364	Tadorna Vulpanser . . . . .	xcvii.	345
Song Thrush . . . . .	xviii.	59	Teal . . . . .	xcix.	356
Solan Goose . . . . .	cxvi.	418	Tengmalm's Owl . . . . .	xiii.	41
Sparrow-hawk . . . . .	vii.	22	Tetraonidae . . . . .		233
Spoonbill . . . . .	Lxxviii.	283	Tetrao lagopus . . . . .	Lxiii.	236
Spotted Flycatcher . . . . .	xvi.	49	„ Scoticus . . . . .	Lxiii.	235
Spotted Sandpiper . . . . .	Lxxx.	295	„ tetrix . . . . .	Lxii.	234
Spotted Crake . . . . .	Lxxxix.	318	„ urogallus . . . . .	Lxii.	233
Spotted Gallinule . . . . .	Lxxxix.	318	Thick-kneed Bustard . . . . .	Lxvii.	247
Starling . . . . .	xlvi.	173	Thalassidroma pelagica . . . . .	cxxx.	460
Sterna Anglica . . . . .	cxxi.	431	Titlark . . . . .	xxxvi.	133

	PLATE	PAGE		PLATE	PAGE
Tomtit . . . . .	xxx.	112	Water-ouzel . . . . .	xvii.	53
Tommy Noddy . . . . .	cxiii.	408	Water-crake . . . . .	Lxxxix.	318
Totanus calidris . . . . .	Lxxx.	289	Water-rail . . . . .	xc.	322
„ glareola . . . . .	Lxxx.	291	Wheatear . . . . .	xxiv.	82
„ hypoleucos . . . . .	Lxxx.	293	White-eyed Duck . . . . .	ci.*	368*
„ macularius . . . . .	Lxxx.	295	White-tailed Eagle . . . . .	ii.	6
Tree Pipit . . . . .	xxxv.	131	White Owl . . . . .	xiv.	37
Tree Sparrow . . . . .	xl.	153	Whiterump . . . . .	xxiv.	82
Tringa maritima . . . . .	Lxxxviii.	315	Whitethroat . . . . .	xxvii.	96
„ platyrhyncha . . . . .	Lxxxvii.	311	White-fronted Goose . . . . .	xciv.	335
„ variabilis . . . . .	Lxxxviii.	313	Whimbrel . . . . .	Lxxxix.	287
Troglodytes vulgaris . . . . .	liii.	199	Whinchat . . . . .	xxiv.	80
Tufted Duck . . . . .	cii.	374	Whiskered Tern . . . . .	cxx.*	430*
Turdus iliacus . . . . .	xix.	61	Wigeon . . . . .	xcix.	358
„ merula . . . . .	xix.	63	Wild Duck . . . . .	xviii.	352
„ musicus . . . . .	xviii.	59	Willow Wren . . . . .	xxviii.	101
„ pilaris . . . . .	xviii.	57	Willow Warbler . . . . .	xxviii.	101
„ torquatus . . . . .	xix.	65	Window Swallow . . . . .	lvii.	216
„ viscivorus . . . . .	xvii.	55	Wood Owl . . . . .	xiii.	39
Turnstone . . . . .	Lxxi.	263	Woodchat Shrike . . . . .	xv.	46
Turtle Dove . . . . .	Lx.	229	Wood Warbler . . . . .	xxviii.	99
Twite . . . . .	xl.	167	Wood Lark . . . . .	xxxvii.	139
Upupa epops . . . . .	liv.	201	Wood Pigeon . . . . .	Lx.	225
Uria Brunnichii . . . . .	cx.	403	Wood Grouse . . . . .	lxii.	233
„ grille . . . . .	cxii.	405	Wood Sandpiper . . . . .	Lxxx.	291
„ troile . . . . .	cix.	399	Woodcock . . . . .	Lxxxv.	303
Vanellus cristatus . . . . .	Lxx.	261	Wren . . . . .	liii.	199
Velvet Scoter . . . . .	ci.	365	Wryneck . . . . .	liii.	197
Virginian Quail . . . . .	Lxv.	241	Yellow Willow Wren . . . . .	xxviii.	99
Vulturidæ . . . . .	i.	1	Yellow Wagtail . . . . .	xxxiv.	129
Vultur percnopterus . . . . .	i.	1	Yellow Bunting . . . . .	xxxix.	145
Water-hen . . . . .	xc.	325	Yellow-ammer . . . . .	xxxix.	145
			Yellow Yowley . . . . .	xxxix.	145
			Yunx torquilla . . . . .	liii.	197

LONDON :

Printed by S. & J. BENTLEY, WILSON, and FLEY,  
Bangor House, Shoe Lane.





